

AND UNUSUAL WEATHER PHENOMENA WITH LATE REPORTS AND CORRECTIONS



COVER:

Cars wind their way through 3 inches of hail covering Colorado 7 in South St. Vrain Canyon, 5 miles west of Lyons, Colorado. The hail, up to 0.75 inch in diameter, was dropped by the storm which later devastated parts of Denver on the afternoon of July 11th. *Photo courtesy: Vern Walker; Daily Camera; Boulder, Colorado.*

Dage

CONTENTS

	. · · · · · · · · · · · · · · · · · · ·	age
Storm Folks		3
Outstanding Storms of the Month		4
Storm Data and Unusual Weather Phenomena		17
Late Reports and/or Corrections		
Storm Summaries		
Reference Notes and "F" Scale Definitions		170

STORM DATA

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The Storm Data and unusual Weather Phenomena Narratives and Hurricane/Tropical Storm summaries are prepared by the National Weather Service. Monthly and annual statistics and summaries of tornado and lightning events resulting in deaths, injuries, and damage are compiled by cooperative efforts between the National Climatic Data Center and the National Severe Storms Forecast Center.

STORM DATA contains all confirmed information on storms available to our staff at the time of publication. However, due to difficulties inherent in the collection of this type of data, it is not all-inclusive. Late reports and corrections are printed in each edition.

Maps of the National Weather Service Forecast Zones which are used in the Storm Data and Unusual Weather Phenomena section will be printed in all editions.

Except for the limited editing for grammatical errors, material submitted are generally published as received.

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The editors of STORM DATA solicit your help in acquiring photographs (prints or slides; black and white, or color), maps, clippings, etc. of significant or unusual weather events (past or present). These could be for use in the "Outstanding Storms of the Month" or "Et Cetera" sections of STORM DATA. We request our subscribers or other interested persons to mail such items to:

Mr. Vince Miller 1464 Wood Thrush Way Marietta, GA 30062

Any such items received by the editors will be for use in STORM DATA only. Any other use will be with the permission of the owner of said items. Materials submitted will be returned if requested in the original submission.

"I certify that this is an official publication of the National Oceanic and Atmospheric Administration and is compiled from information received at the National Climatic Data Center, Asheville, North Carolina 28801."

Director

National Climatic Data Center

Tannet D Waden

STORM FOLKS . .



Biographical Sketch ROGER STAIRS

Roger began his career in 1972 as an Aerographers Mate for the United States Navy at Master Jet Base Cecil Field, Florida. Following his discharge in 1976, he was employed by the National Weather Service as a Meteorological Technician, first at WSFO Albuquerque until 1979 and then at WSO Chattanooga, Tennessee. In 1982, Roger was chosen for a full time university assignment at Pennsylvania State University in order to convert from Weather Service Specialist to Meteorologist. After completing the required academic requirements for meteorologist, Roger was reassigned to WSFO Atlanta in the spring of 1983. In the fall of 1984, he was transferred to his present assignment at WSFO Pittsburgh.

Roger became the SKYWARN focal point in 1985 and assumed all of the WPM duties in 1988. During this period, Roger increased the number of SKYWARN observers by over 300 percent. He prepares and distributes an annual newsletter to all

SKYWARN observers and Ham clubs. In these newsletters, Roger blends valuable training material with interesting weather data. He obtained a Ham radio license so that he could establish the proper rapport with the local Ham clubs. Roger has worked closely with Pittsburgh officials to ensure that they incorporated the possibility of severe weather into their plans for the City of Pittsburgh Marathon. In spring 1990, he prepared and presented "Safest Places in Schools" program in 12 counties representing nearly 200,000 students. In preparation for WSFO PIT's expanded warning area under the NWS's modernization and restructuring program, he has developed a two-year plan detailing the activities and the associated time frame required.

Roger is a highly motivated, effective WPM, who is intimately involved in the warning coordination and hazard awareness program and its goals.

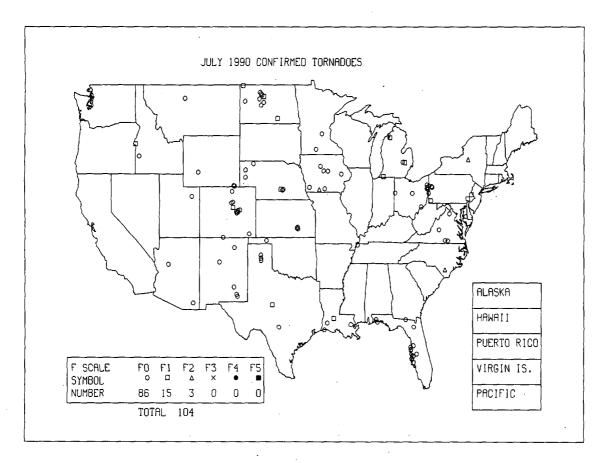
CORRECTIONS TO JUNE 1990 OUTSTANDING STORMS OF THE MONTH.

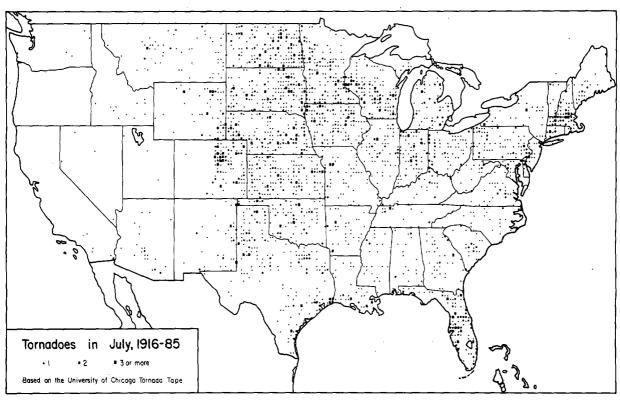
- 1. The apparent F5 symbol shown in southwestern Nebraska in the map of "JUNE 1990 CONFIRMED TORNADOES" on page 4 is really the plot of an F4 tornado (June 15th) on top of the plot of an F1 tornado (June 1st).
- 2. The text on page 15 beginning with "Below (left)" should read: Indianapolis (Indiana) WSR-74C radar

presentation at 2328 UTC (6:28 p.m. EST).

- 3. The reference to "90 tons" on pages 20 and 22 should be "70 tons."
- 4. The New Mexico location listed in the table on page 29 should be: Waste Isoltn Pilot Plant. (It is located about 23 miles east of Carlsbad.)

OUTSTANDING STORMS OF THE MONTH





1. PRECIPITATION AND TEMPERATURE ANOMALIES - JULY 1990

Table 1 shows the July 1990 temperature and precipitation rankings for the nine climatically homogeneous regions shown in Fig. While many parts of the contiguous U.S. recorded near to above normal July rainfall, less than half the usual July rain fell on portions of the Southeast, the southcentral Great Plains, the lower Mississippi and Ohio Valleys, eastern Great Basin, and Northcentral Rockies (Figs. 2 and 3 on the following page). Warmer than normal monthly temperatures were generally recorded west of the Rockies and from the Appalachians eastward (Fig. 4 on page 8). Regionally, July 1990 ranked as the 10th and 11th warmest July of

TABLE 1. TEMPERATURE AND PRECIPITATION RANKINGS FOR JULY 1990, BASED ON THE PERIOD 1895-1990 (96 YEARS) WHERE 1 = DRIEST/COLDEST, 96 = WETTEST/HOTTEST.

REGION	PRECIPITATION	TEMPERATURE
Northeast East North Central Central Southeast West North Central South Southwest Northwest West	55 76 75 14 55 50 88 56 60	53 25 29 74 40 19 31 86 87
National	60	42

From National Climatic Data Center

record (since 1895) in the West and Northwest, respectively.

135* 120* 115* 110* 105* 100* 95* 90* 85* 80* 75* 70*

NORTHWEST

WEST NORTH CENTRAL

EAST NORTH CENTRAL

OCENTRAL

SOUTHWEST

SOUTHWEST

SOUTH

SOUTHEAST

70*

22*

Fig. 1

From National Climatic Data Center

Fig. 2

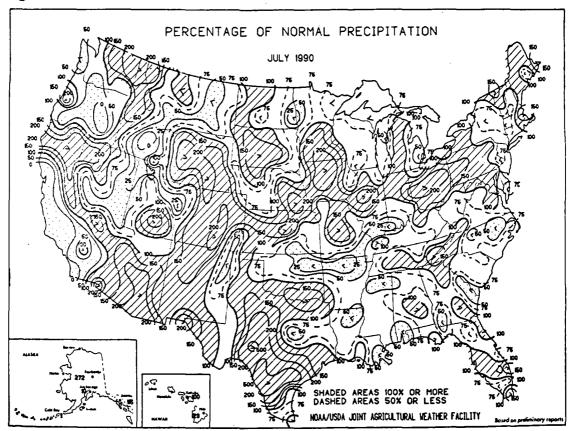
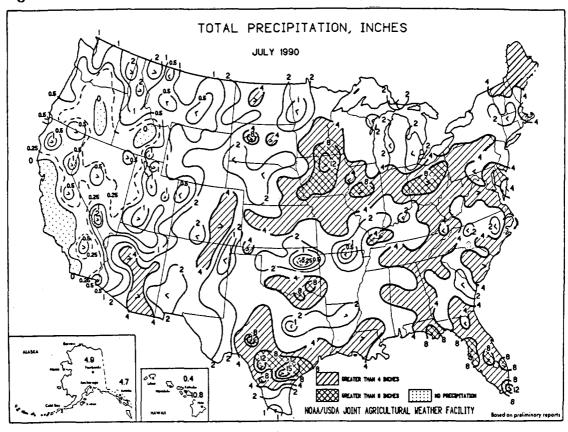
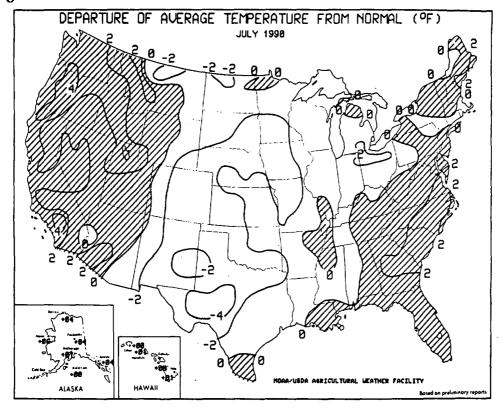


Fig. 3



Above figures reprinted from Weekly Weather and Crop Bulletin - August 7, 1990

Fig. 4



Reprinted from Weekly Weather and Crop Bulletin - August 7, 1990

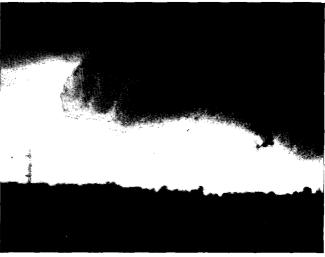
2. COLORADO FRONT RANGE HAILSTORM OF JULY 11, 1990

The most costly hailstorm in U.S. history (the \$505 million estimate several weeks after the event is probably too low a figure) battered many parts of Colorado's Front Range from near Estes Park to Colorado Springs. The hailstorm, which was accompanied at times by torrential rains and high winds, produced a swath of damage generally 5 to 10 miles wide; the hardest hit area included parts of the Denver metropolitan region. Hail the size of golf balls and baseballs damaged thousands of roofs (in some cases punching holes through roofs), battered tens-of-thousands of automobiles, defoliated thousands of trees, ripped up

greens and fairways on several golf courses, and knocked out power and phone service to thousands of customers -to name just a few effects.

Sixty injuries were reportedly caused by the storm. A number of people were trapped on rides at the Elitches Amusement Park in northwest Denver when power failed holding them hostage to hail, wind, and rain. Forty-seven people from the park were sent to local hospitals for treatment of bumps, cuts, and bruises.



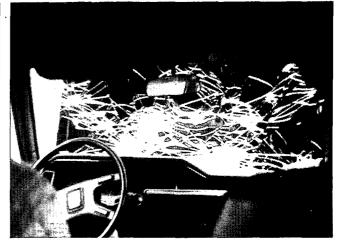


Opposite Page: Hailstorm approaching Denver. Photo sites near I-25. Photos courtesy: Steve Hodanish of Fort Collins, Colorado.



Above: Looking west (at 2:42 p.m. MDT) from I-225 near Cherry Creek Reservoir at the hailstorm which is moving south from Denver. Two minutes later, the photographer encountered hail as he was driving west--trying to get ahead of the storm. His chase car ended up with a dented roof as a result of three brief interludes with the edge of the hail. Below (left): Looking west from I-70 just north of the Denver WSFO; the storm is pounding downtown Denver at this time (2:31 p.m. MDT). Below (right): The photographer's wife was driving his Subaru on this day and was in downtown Denver; the photo shows the result of 3-inch hailstones striking the windshield. Photos courtesy: Richard Keen of Golden, Colorado.





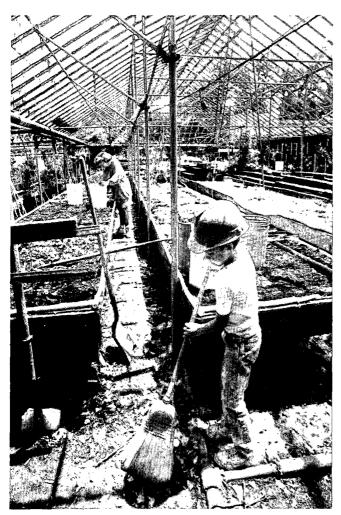


Top two photos: The hailstorm left up to 4 inches of hail covering these residential lawns about 1 mile north of Lakeside Amusement Park. Middle (left): Hail removal is a lot like snow removal. Middle (right): Much of the hail was rather small, but here the hail was larger than golf balls. Bottom left: Some trees were completely defoliated; these were just partially defoliated. Bottom (right): Window damage was widespread. Photos courtesy: Steve Hodanish of Fort Collins, Colorado.





Above (left): Many Denver area cars had their windshields smashed by hailstones. Above (right): Winds accompanying the hailstorm downed many trees, such as this one at West Fifth Avenue and Santa Fe Drive. Photos courtesy: Cyrus McCrimmon; Rocky Mountain News; Denver, Colorado. Bottom (left and right): Hailstones as large as golf balls broke almost every pane in the five hothouse roofs of the South Logan Florist Shop; unfortunately, the business was uninsured. Scores of volunteers helped clean up the broken glass and salvaged what they could of shredded plants. Photos courtesy: George Kochaniec, Jr.; Rocky Mountain News; Denver, Colorado.





3. JULY 1990 WEATHER POTPOURRI

For additional details concerning the following pictures, see the appropriate date and state information in the "Storm Data and Unusual Weather Phenomena" section.





The severe thunderstorm which hit Great Falls, Montana, on July 2nd destroyed a gun shop (right) and toppled trees (below left). Underpasses (below right) and low-lying areas were flooded. Photos courtesy: James E. Larcombe; Great Falls (Montana) Tribune.

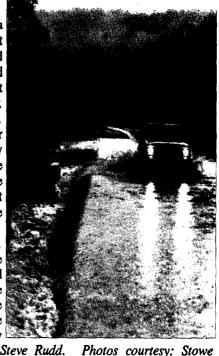


Left: Crews rescue a picnic table swept away from the Gold Brook Campground by the Vermont Flooding of July 4th. Courtesy: Steve Rudd. Right: The shoulder of Nebraska Valley Road near the Barrows turn became a waterfall as a result of the rains of the 23rd. Courtesy:

Gregory Popa.

Middle (left): The rains of the 23rd caused the Little River to flood the playground of the Stowe Coop Nursery

School. Courtesy: Steve Rudd. Photos courtesy: Stowe (Vermont) Reporter.

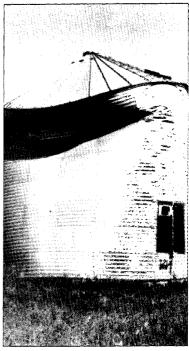


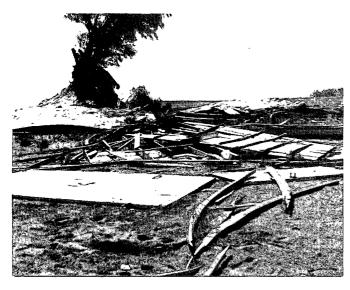


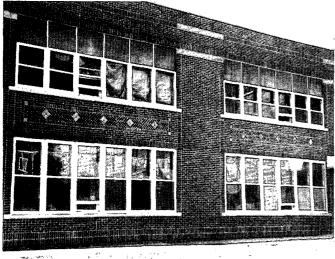


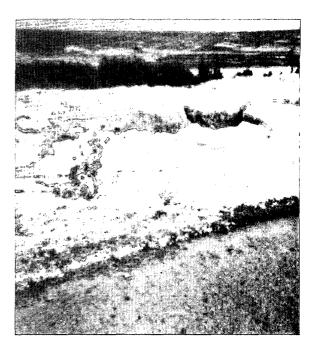
Above: As a result of heavy rains on the 25th-26th, 2 feet of water covered a six-block area of Thurman, Iowa, for a time. As the water receded, a muddy play area was found! Photo courtesy: Peter Weber; Evening Sentinel; Shenandoah, Iowa. Severe thunderstorms on the 7th caused considerable damage to parts of South Dakota's Campbell County, particularly from near Pollock to southeast of Herreid. Some lifelong Herreid residents said it was the worst storm they had ever seen. Below (left): Barn on the John LaFave farm which was blown from its foundation and split apart. Below (right): Grain bin damage on the Kenny Moser farm. Photos courtesy: Prairie Pioneer; Pollock, South Dakota.

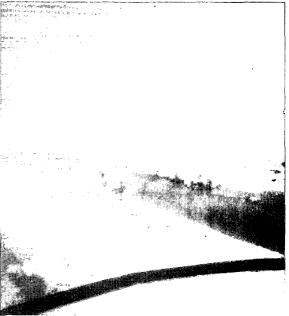














Top (left): A wooden quonset on the Dwight Rossow farm south of Herreid was completely demolished by the storm of the 7th. Almost every building in Herreid sustained hail damage to windows, sidings, and roofs. The Herreid School (middle left) had 120 broken panes of glass. Photos courtesy: Prairie Pioneer; Pollock, South Dakota. Top (right): Water runoff from a severe thunderstorm on the 23rd left hail drifts to 3 feet deep 17 miles south and 10 miles west of Oberlin, Kansas. Above (right): "Hail fog" 18 miles south and 10.5 miles west of Oberlin. Left: Every window in this farmhouse 19 miles south and 11 miles west of Oberlin was broken by hail. Note the defoliated trees. Photos courtesy: Bob Keenan; Road Supervisor; Decatur County Highway Department; Oberlin, Kansas.

4. ILLINOIS COLD AIR FUNNEL OF JULY 24, 1990

The following is an account sent to the editors by Jack R. Cooley, MIC; NWS Grand Rapids, Michigan:

On July 24, 1990, I was traveling south through Illinois on Interstate Highway 57. The area was under the influence of a large high pressure area. Skies were relatively clear but quite hazy. The temperature was about 80°, relative humidity 50% (dew point 60°), and the wind was south at 5 mph. At 1730 CST, I was in the vicinity of Manteno and noticed a towering cumulus cloud off to the west. The cloud was quite unusual since its top was shearing off and blowing downstream a considerable distance (Photo A).

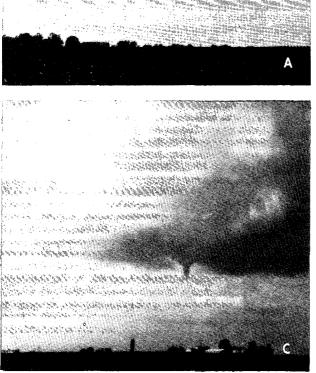
Nearly an hour later, I was near Rantoul, looking to the south at what appeared to be a rather benign cumulus cloud, possibly approaching the cumulonimbus stage (without an anvil). As I watched this cloud a small bulge began to form at the base toward the west end of the cloud. At 1830 CST I snapped the photograph shown in B.

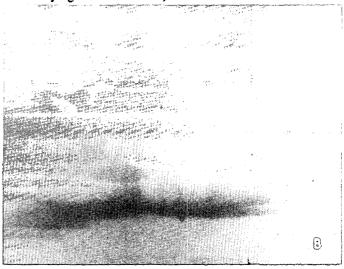
The funnel continued to be visible for over an hour (until I reached Tuscola and evening darkness prevented further observation at 1933 CST). Before darkness, the funnel

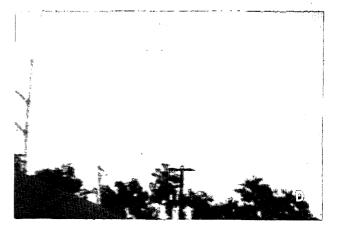
was clearly visible for over an hour and from as far as 25 miles distant. The funnel was quite visible from most perspectives. However, when I was directly west of the funnel, the under cloud background was quite dark and the funnel was difficult to discern. When there was a blue sky background, the funnel was quite prominent and easy to distinguish.

The funnel cloud was just northeast of Champaign and did not appear to move appreciably during the hour or more that I monitored it. The maximum development that I observed from my vantage point is indicated in C (this was near Champaign). TV station WCIA (Channel 3, Champaign, IL) set up a video camera for a period of time and obtained the picture shown in D. The WCIA vantage point was much closer and shows greater development of the funnel.

This was the first time that I had observed a cold air funnel cloud. However, I feel this was a fairly typical cold air funnel scenario (based on my 23 years of experience in receiving spotter and public reports, issuing statements and studying cold air funnels).





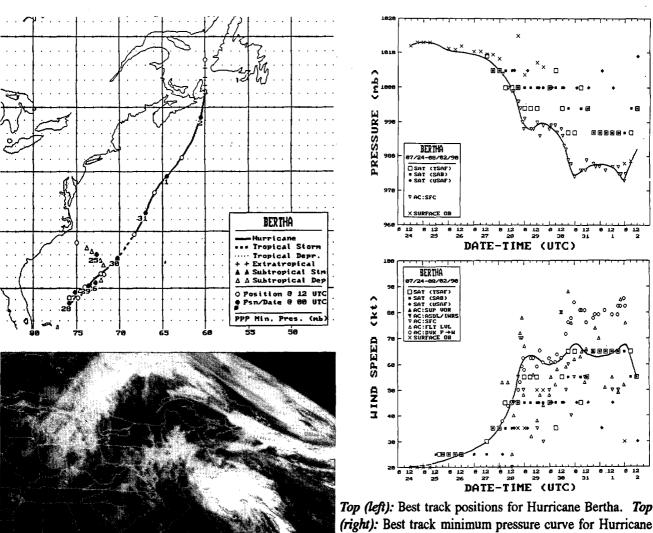


5. JULY 1990 TROPICAL STORMS AND HURRICANES

(Editor's Note: Atlantic and Eastern Pacific tropical systems which have little or no impact on the U.S. or its possessions will be covered in the December 1990 STORM DATA.)

5(a). HURRICANE BERTHA (July 24th to August 2nd, 1990)

Bertha was an Atlantic hurricane that originated from a non-tropical area of low pressure near Cape Hatteras, North Carolina. The northern portion of a tropical wave did, however, interact with the system during its tropical stage. Bertha produced high surf from North Carolina to Nova Scotia, and caused moderate beach erosion in North Carolina and the Outer Banks. Seven seamen died as a result of Bertha. In addition, two people drowned at northern Florida beaches as a result of rip currents generated by Bertha.



Top (left): Best track positions for Hurricane Bertha. Top (right): Best track minimum pressure curve for Hurricane Bertha. Above: Best track maximum sustained wind speed curve for Hurricane Bertha. Xs denote nearby surface reports or center fixes derived from analyses of surface data. Map and plots courtesy: NHC Coral Gables, Florida. Left: Satellite photo of Hurricane Bertha at 1301 UTC (0801 EST) on July 30, 1990. Photo courtesy: Leo Grenier; NSSFC Kansas City, Missouri.

A special thank you to Gene Rhoden of NSSL, Norman,

Oklahoma, for providing photos used in this issue which were made from video provided by Steve Hodanish.

		TIME			NO. PER	OF SONS	EST II	MATED AGE	JULY 1990
PLACE	D A E	LOCAL Standard	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K	- N-JORGEO	- 1200 HBJ- Y	CEOTA	CHARACTER OF STORM
ALABAMA		V							
Marion County	02	1240CST			0	0	?	?	Thunderstorm Wind
	Stro	ong thunder	storm win	ds blew ou	it two	large	e wind	ows in	downtown Winfield.
Fayette County	02	1305CST			0	0	?	?	Thunderstorm Wind
	Tre	es were blo	wn down	at Fayette.					
Jefferson County		1305CST 1357CST 1405CST	·		0 0 0	0 0 5	?	??	Hail (1.75) Thunderstorm Wind (G70) Thunderstorm Wind
	At 70 1 Five pit	1305 CST g mph in Birn e men were beside a ch	olf ball-si ningham. slightly in urch. The	ze hail fell At 1405 C jured in H men were	at Tr ST tr omew unde	russvi ees wood v ood v	lle. A ere blo when a h the r	at 1357 own do large roof coo	CST thunderstorm winds gusted to wn in Homewood and Birmingham. netal roof was blown off a barbecue oking barbecue.
Montgomery County	02 02	1330CST 1330CST			0	0	?	?	Thunderstorm Wind Hail (0.75)
•	Din	ne-size hail	fell and tr	ees were b	lown	dow	n in M	ontgon	nery.
Bibb County	02	1335CST			0	0	?	?	Hail (1.00)
	_	ırter-size ha	il fell at V	Vest Block	ton.				
Autauga County		1355CST			0	0	?	? .	Thunderstorm Wind
	Thu Prat	inderstorm t tville. Tre	winds ripp es and pov	ed the roo ver lines w	of off vere b	a mo lown	bile cl down	assroor in the	n and damaged another building in same vicinity.
Tuscaloosa County	02	1415CST			0	5	?	?	Thunderstorm Wind
	Stro five	ong thunders people insi	storm wind ide.	ls blew ove	r a te	npora	ry fire	works	shack in Northport, slightly injuring
Perry County	02	1440CST			0	0	0	0	Thunderstorm Wind
	Lar	ge tree limb	s were blo	own down	at Su	ttle.			
Dallas County	02 02	1445CST 1445CST			0	0	?	? 0	Thunderstorm Wind Hail (0.75)
	Tre	es were blo	wn down	and dime-s	ize h	ail fel	l at M	arion J	unction.
Tallapoosa County	02	1455CST			0	0	?	?	Thunderstorm Wind
	Stro Thi	ong thunders rty to 50 tre	storm wind ees were u	ds blew tre prooted in	es on the s	to thr ame v	ee hou vicinity	ises abo	out 5 miles southwest of Dadeville.
Clarke County	03	1705CST		1	0	0	0	0	Thunderstorm Wind
	Trea	es and powers as of the con	er lines we unty.	re blown d	own a	about	1 mile	south	of Grove Hill and in other scattered
Shelby County	07	2000CST			0	1	0	0	Lightning
	An con	18-year-old cert at an ai	l male was mphitheate	knocked r about 14	off h	is fee s sout	t and i th of d	njured lowntov	by lightning. He was attending a wn Birmingham.
Talladega County	08	1330CST			0	0	?	?	Thunderstorm Wind

Trees were blown down and a large antenna was twisted about 6 miles north of Talladega.

JULY 1990

		TIME			NO.	OF SONS	EST I	MATED AGE		JULY 199	ю
PLACE	DA E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K-1-MO		а.е:Оа.шес->-	COCOEN	CHARACTER OF STORM		
ALABAMA Con	t'd		•								
Coffee County	08	1530CST			0	0	?	?	Thunderstorm Wi	nd .	
	Tre	es and pow	er lines we	ere blown	down	at Ki	nston.				
Madison County	08	1540CST			0	0	?	?	Thunderstorm Wi	nd	
	Tre thr	ees and pow oughout the	er lines w county.	ere blown	dow	n by s	strong	thunde	erstorm winds at sca	ttered location	18
Geneva County	08	1545CST			0	0	?	?	Thunderstorm Wi	nd	
	At eas	Samson, tre t of Samson	es were bl	own down	and b	olocke	ed road	ls. A p	power pole was blow	n down 3 mile	es:
Henry County	08	1700CST			0	0	?	?	Thunderstorm Wi	nd	
	Nu dar	merous tree naged a hou	es were bl se. Also,	own down a roof of a	a fe barn	w mi was l	les ea blown	st of A	Abbeville. One tree the same area. No o	e fell onto an ne was injured	ıd 1.
Barbour County	08	1725CST	•		0	0	?	?	Hail (1.75)		
	Go	lf ball-size	hail fell at	Blue Sprin	ngs.		,	•			
Elmore County	08 08				0	0	?	?	Thunderstorm Wi Thunderstorm Wi		
	noi	1845 CST rthwest of Wrtheast of W	etumpka.	At 1907 (CST t	nd boa rees a	ats we nd pov	re dam wer lin	aged on Lake Jordar es were blown down	about 8 mile about 17 mile	es. es
Jefferson County	10 10 10	1620CST 1640CST 1640CST			0 0 0	0	???	?	Hail (1.75) Hail (1.75) Thunderstorm Wi	nd	
	At fel	1620 CST g I. A perma	olf ball-siz	ze hail fell ess sign an	in do d a fe	wntov ew tre	vn Bir es we	mingha re blow	am. At 1640 CST go yn down in eastern E	olf ball-size ha Birmingham.	il
Saint Clair County	10 10	1805CST 1805CST			0	0 1	?	?	Thunderstorm Wi Lightning	nd	
	a re Ni	oof was blov	wn off a ho ars were a	ouse and ei	ight p	lanes	were d	lamage	ropwell, and London d at the Saint Clair C ale was injured by	County Airport	t.
Covington County	10	1900CST	•		0	0	?	?	Thunderstorm Wi	nd	
	Tre	ees were blo	wn down	in Florala	and is	n the	Conec	uh Nat	tional forest.		
Henry County	11	1430CST	i		0	0	?	?	Thunderstorm Wi	nd	
	Sev 2 n	veral trees w niles northe	ere blown ast of Abb	down, mol eville.	bile h	omes	were d	amage	d, and shingles were	blown off roof	fs
Colbert County	11	1630CST			0	0	?	?	Lightning		
	In ' plu	Tuscumbia, imbing.	a man rece	eived an ele	ectrica	al sho	ck fron	n light	ning while working o	on his bathroor	m
Baldwin County	18	1305CST			0	0	?	?	Thunderstorm Wi	nd	

Thunderstorm winds destroyed a mobile home at Foley.

		TIME		<u> </u>	No.	OF SONS	ESII	MATED AGE		JULY 1990
PLACE	Đ	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K	-3-1-Decline	P WOO HENT	CDECORUM .	CHARACTER STORM	
ALABAMA Con	t'd									
Lauderdale County	22	1400CST			0	0	?	?	Thunderstorm Wind	•
	Nu	merous tree	s and pow	er lines we	ere bl	own (down a	at Flore	ence.	
Limestone County	22	1545CST			0	0	?	?	Thunderstorm Wind	
	Tre	es were blo	wn down	at scattered	d loca	tions	in the	county	<i>.</i>	
Madison County	22	1615CST	•		0	0	?	?	Thunderstorm Wind	·
	Tre the	es and power county.	er lines we	re blown d	own a	it Hui	ntsville	and at	other scattered locations th	roughout
Morgan County	22 22	1615CST 1615CST			0	0	?	?	Thunderstorm Wind Lightning	4
		es and pow	er lines w	ere blown	dow	n in 1	Decatu	r. Nu	merous house fires were s	tarted by
Sumter County	23	1230CST			0	0	?	?	Thunderstorm Wind	
	Pov	ver lines we	ere blown	down at G	eiger				•	
Tallapoosa County	23	1615CST			0	0	?	?	Thunderstorm Wind	
	The blov	roofs of a	car wash wer lines i	and a stor	age b	uildii nity.	ng wer	e dama	ged at Carrville. Also, tr	rees were
Lee County	23 23	1628CST 1722CST			0	0	?	?	Thunderstorm Wind (Go Thunderstorm Wind	51)
	At 1 CS1	1628 CST the numerous	nunderstor trees were	m winds go blown do	usted own 5	to 69 mile	mph a	t the A	uburn Agricultural Center. F Pine Grove.	At 1722
Jefferson County	23	1905CST			0	0	?	?	Hail (1.75)	4
	Gol	f ball-size l	nail fell at	Kimberly	and N	Morri	s.		•	
ARIZONA										
Apache County Cove, 40 SW 4 Corners	03	1230MST	,		0	1	?	0	Flash Flood	
	One	0-foot wall survivor s er hit.	of water aid the 95	swept four 0 Caterpil	r wor lar fr	kers a ont e	away v nd loa	vhile at der roll	a diversion dam constructed on top of him after the	tion site. e wall of
Pima County Tucson	07	1315MST			0	0	3	0	Flash Flooding	
	In a Oro five	3-hour per and Tangu motorists	iod ending e Verde wa were rescu	about 131 atersheds. ed by the	15 MS Seve Sheri	ST, u ral ve ff's D	p to 3. hicles epartn	03 inch were re nent.	nes of rain fell along the Ca ported to have stalled in wa	anada del ashes and
Pima County Tucson	08	1800MST			0	0	3	0	Flash Flooding	

Many roads were closed due to heavy rains of 1 to 2 inches.

JULY 1990

		TIME			NO.	OF SONS	EST I	MATED AGE	
PLACE _	Đ	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K L L L L L L L L L L L L L L L L L L L	CHINCLE	0.000.mp->	wood	CHARACTER OF STORM

ARIZONA Cont'd

Pinal	County
San	Manuel

09 Afternoon 0 1 0 0 Lightning

While chatting with a friend near a mulberry tree, a 35-year-old woman was knocked to the ground. She had first and second degree burns. Coins in her pockets were partially melted and the rivets on her jeans were also melted.

Pima County Tucson area

10 1930MST

0 0 4 0 Flash Flooding

Numerous thunderstorms forced the closure of State Route 86 in the Ryan Field area. Two U.S. Border Patrol agents were rescued from their stranded vehicles. There were flooded washes and highway dips in other parts of eastern Pima County. Wind gusts of 46 mph were reported in the area.

Maricopa County West Phoenix

10 2100MST

0 0 4 0 Thunderstorm Wind

An apartment complex in Goodyear was damaged by high winds. Several homes and small businesses were also damaged. Thousands of customers were left without power.

Pima County Tucson

11 2110MST

0 0 3 0 Thunderstorm Wind

Thunderstorms moved into eastern Pima County from the east. By 2210 MST, isolated power outages had occurred on the east side and power lines were reported downed by winds in the Escalante and Old Spanish Trail area.

Pinal County Casa Grande Maricopa

12 2000MST

0 24 5 0 Thunderstorm Wind

Numerous power poles were snapped off due to high winds. Three people were injured when a concession stand toppled onto them. Twelve people nearby had minor injuries. Nine people were injured in Maricopa when winds overturned mobile homes.

Yavapai County near Seligman

13 1700MST

1 0 0 0 Flash Flooding

A vehicle was washed away as the two occupants attempted to cross a running wash. (F24V)

Mohave County Bullhead City

13 2050MST

0 0 6 0 Thunderstorm Winds

Numerous trailers were damaged and some overturned due to high winds. About \$500,000 damage was estimated to public buildings. Some flooding occurred.

Santa Cruz County 4 E Nogales

14 1900MST

0 ? 5 0 Flash Flooding

Thunderstorms caused flooding in the Kino Springs area. The Santa Cruz was reported running full and several roads were washed out and homes flooded. Minor street flooding also occurred in Sierra Vista, Benson, Tombstone, and Elfrida.

Pima County Avra Valley

15 Early Morning

0 0 0 0 Flash Flooding

Many areas in eastern Pima County had flooding. One gauge had 0.79 inch in just 30 minutes. Street flooding occurred in the Tuscon Estates area as well as Canada del Oro. In the evening, flooding occurred in the Rio Rico area where 1.00 inch fell in 15 minutes.

		•	,						,	JULY 1990
		TIME			NO.	OF SONS	ESTI!	MATED AGE		
PLACE	DAG	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	אייייא		0.000 W00->-	CEOTO	CHARACTER OF STORM	
ARIZONA Cont	'd				·					
Maricopa County Peoria	15	0100MST			0	0	4	0	Flash Flooding	•
	Ma \$50	ny roads w 0,000 in dar	ere closed nages.	due to st	reet f	loodir	ng. A	plant	in Goodyear susta	ined \$20,000 to
Yavapai County Prescott	15	1545MST			0	0	0	0	Funnel Cloud	÷
	Th	understorms	with heav	y rains oc	curre	d in tl	he area	ì.		
Cochise County Pierce	16	1335MST	?	?	0	.0	0	0	Tornado (F0)	
	Αl	U.S. Border	Patrol age	ent reporte	d the	torna	do nea	ır Rou	te 666.	
Pima County Tucson	16	1800MST		ŕ	0	0	0	0	Flash Flooding	
	Mi	nor street fl	ooding oc	curred in the	he Tu	icson	area.			
Pima County Green Valley	18	1745MST			0	0	3	0	Thunderstorm W Hail (0.75)	inds
	The	understorms h. Trees w	dumped (ere uproot	0.70 inch i ed with ot	n less her m	than inor v	30 mi wind d	nutes lamage	with hail and estima	ated winds of 50
Apache County St. Johns	19	1850MST			0	0	0	0	Hail (0.75)	
Pima County Tucson	20	Early Mon	rning		0	0	5	0	Flash Flood Thunderstorm W	inds

Heavy flooding occurred on some of the city roads and several motorists were stranded while trying to cross flooded dips. Several homes and businesses were flooded and damage was estimated to exceed \$30,000. A wall at an apartment complex also suffered \$100,000 worth of damage. A reclamation plant was also flooded. A Tucson man was killed when he fell 40 feet over a waterfall in the Tangue Verde Falls area.

Yavapai County 30 NW Prescott 21 1132MST Tornado (F0)

Some power lines were downed in Williamson Valley.

Maricopa County Deer Valley Arpt 21 1925MST Thunderstorm Wind (G60)

> Winds blew doors off hangars and damaged ten aircraft, resulting in damages estimated as high as \$1 million.

Thunderstorm Winds Flash Flood North Phoenix 21 2030MST

> Microburst winds estimated between 60 and 80 mph damaged many homes, businesses, and trees. The storms were tracked by the Arizona State University/National Weather Service chase team. At one point up to 65,000 customers were left without power. Arizona Public Service sustained about \$350,000 damage to lines and poles. Street flooding was reported near 19th Avenue and Peoria.

							. JULY 1990
	TIME		NO.	OF SONS	EST IN	MATED NGE	JULY 1990
PLACE	D LOCAL LENGT STANDARD PATH (MILE	PATH	K-L-IIIO	CHESCLE		COOOL	CHARACTER OF STORM
ARIZONA Cont	d						
Conconino County Tuba City	22 1800MST		0	0	3	0	Thunderstorm Winds
	A gale force sand stora camper off a truck,	rm generated l and downed a	by di: 100	stant (-year-	thunder old co	rstorm ttonwo	s destroyed a house trailer, pushing od tree.
Gila County Payson	22 1700MST		0	0	5	0	Flash Flood
	Widespread heavy rai outages lasted for abotown.	ns hit this are out 65 minutes	ea. A sin so	bout outh F	1.90 ii Payson.	nches i Majo	fell in a little over an hour. Power or flooding occurred throughout the
Maricopa County Phoenix	24 0200MST		0	0	6	0	Thunderstorm Winds Flash Flooding
	Widespread damage to Glendale. Two to 4 is (a pedestrian and three Indian Bend Wash in	e people in s	ehicle fell i separa	es, po n mar te vel	ower pony area hicles)	oles, and soles of N were	nd trees. About 4.25 inches fell in forth Phoenix. At least four people swept away by flood waters in the
Pima County Tucson area	24 All Morning		1	2	6	?	Flash Flood
	the swollen Santa Crurescues were made du in the county, and 24 2 inches in only 30 mi were evacuated volunt 21,000 cfs in the Sant	iz River at St ring the morn roads were cl nutes. Severa arily at the 49 a Cruz River.	ing. osed in hon l'ers (mak	ry's I Up to in the nes we Count ing th	Road at 4.00 city. ere floor Clulers the	nd was inches One au oded in b. The highes	nty. One unidentified man fell into s swept away. More than 50 river of rain resulted in 25 road closures atomatic gage had 3.55 inches, with the Oracle area. About 150 people Public Works Department reported to July discharge since 1910. At the estone underpass. (M?)
Maricopa County Cave Creek	25 0100MST		0	0	4	0	Hail (2.75)
	There was considerab	le damage to l	home	s and	busine	sses in	the area.
North Phoenix	25 0100MST		0	0	3	0	Thunderstorm Winds
	A few trees were upro	ooted near De	er Va	lley A	Airport		
Maricopa County East Mesa	30 1942MST		0	0	4	0	Thunderstorm Winds
	Several areas were lef ripped out of cement-	t without pow anchored pylo	er. (one se	ection of lesa In	of a roostallati	of measuring 90-feet by 26-feet was on Company. Trees were downed.
Pinal County Apache Junction	30 1835MST		0	0	3	0	Thunderstorm Wind (G50)
	A Skywarn spotter me	easured 57 mp	h wi	nds.	Some 1	power	lines were downed.

31 2000MST

Pima County

Tucson

0

0

3

A pine tree was knocked over in the west-central part of the city, damaging a car. Winds gusted to 55 mph at the airport.

0

Thunderstorm Winds

	1	IME		м,	NO PEŔ:	OF SONS	ESTIM/ DAMA	ATED GE		JULY 1990
PLACE		OCAL ANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K-L-4ED		~- 2011/2020	COCO	CHARACTER OF STORM	:
ARIZONA Cont'	d									
Maricopa County East Mesa	31 205	55MST			0	0	4	0	Hail (0.75) Thunderstorm Wi	nd (G60)
	Winds o	lamaged	a hangar	and sever	al aire	eraft a	it Falco	n Fie	·	
ARKANSAS	•	J	J						•	
Jefferson County Pine Bluff	03 Un	known			1	0	0	0	Heat	
	A man	was fou	nd dead ir	his home	. Th	e caus	se was	appare	ently heat stroke. (N	/65P)
Pulaski County Little Rock	05 Un	known		e .	1	0	0	0	Heat	
	A woma	an died	in her apa	rtment fro	m he	at stro	ke. (F	43P)		
Garland County Hot Springs	08 Un	known			2	0	0	0	Heat	•
	An elde	rly coup	ole died in	their hon	ne fro	m hea	ıt-relate	d cau	ses. (M86P, F88P)	1
Pulaski County North Little Rock	10 Un	known			2	0	0	0	Heat	
	A man v	was four	id dead in	his apartm	ent.	Heat s	stroke v	was th	e suspected cause of	death. (M62P)
Faulkner County Conway	10 131	15CST			0	0	5	0	Lightning	
	me trees	s m turi	ning strike t and Rad by the sto downed t by lights	some pow	hunde KCO everal er lin	erstori N bot trees es cau	m cause th had downer using a	ed scar equipted acro few p	ttered damage across nent damaged. Thro oss the city. Falling power outages. A fe	Conway. The ee transformers branches from ew utility poles
Garland County 6 N Mountain Pine	10 145	55CST	•		0	2	5	0	Thunderstorm Wi	nds
	Seven buprooted	oats wei d. One	re capsized woman su	i, several o	campe roken	rs and	d traile: when h	rs sma	struck Lake Ouach shed, and at least a h in uprooted tree and	alf dozen trees
Jefferson County Pine Bluff	10 154	IOCST		٠	0	0	5	0	Lightning	
	Lightnir	ng cause	d a fire w	hich destr	oyed	a war	ehouse.	. Dar	nage was estimated a	at \$175,000.
Lawrence County Walnut Ridge	10 170	OCST			0	0	4 .	0	Thunderstorm Wi	nds
	Thunder one buil	rstorm v lding, lu	vinds caus imber scat	ed damage tered, and	at the	e Wal er line	nut Ric s down	lge In ied.	dustrial Park. A roof	was blown off

A house suffered minor damage from a lightning strike.

Craighead County Jonesboro

11 1250CST

Lightning

	1	1		1	NO.	OF	ESTIM	ATED		JULY 1990
		TIME			PER	SONS	EST IN	GÉ		
PLACE	Đ	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	OH L	OHIOC. E.		ONDOW	CHARACTER OF STORM	
ARKANSAS Cor	nt'd									
Pulaski County North Little Rock	11	1350CST			0	0	3	0	Lightning	
	A l	ightning stri I Sherwood.	ike at a sul	ostation kn	ocked	out p	ower t	o abou	ıt 500 residents in N	Iorth Little Rock
Pulaski County Jacksonville	11	1358CST			0	0	4	•0	Lightning	
	Lig	htning struc	k a transf	ormer at a	sub-s	tation	knock	ing ou	at power to nearly 5	5,000 customers.
Pulaski County Jacksonville	11	1405CST			0	1	4	0	Thunderstorm W	ind (G52)
	Thi A	understorm woman suffe	winds blev ered minor	v down tree injuries w	es and when s	signs shocke	s. Seve	ral car dowr	rs were damaged by ned electric line.	the falling trees.
Lonoke County 2 S Cabot	11	1415CST			0	0	2	0	Thunderstorm W	'inds
	Th	understorm	winds dow	ned trees	along	Arka	nsas H	ighwa	y 89 south of Cabo	t.
Howard County Nashville	11	1830CST			0	0	3	0	Lightning	
	A 1	lightning str	ike at the	City-Coun	ty Bu	ilding	dama	ged the	e facility's compute	r system.
Howard County Nashville	12	0130CST			0	0	4	0	Lightning	
	Lig	htning struc	k an auto	mobile dea	lershi	p, sta	rting a	fire v	which caused severe	damage.
Boone County Harrison	20	1850CST			0	0	4	0	Thunderstorm W	inds
	cra	thunderstorn actural dam ghway 65. I cked. Som onument at a	e metal av	vnings we	re als	o pro	wn or	r a bu	ower lines, and cau a couple of roads, bs and a couple of u ilding and the Vet	including U.S. itility poles were eran's Memorial
Pike County Glenwood	22	1720CST			0	0	5	0	Thunderstorm W	inds
	A 1	understorm manufacturii vspaper offi	ng plant ai	nd a trucki	ng co	mpan	buildin y both	gs, br suffe	oke windows, and b red roof and windo	olew down trees. w damage. The
Ashley County 4 W Montrose	29	1240CST			0	0	4	0	Thunderstorm W	inds
	An also	apparent do blown ove	wnburst b r. This to	lew over p ower was d	ower lesign	lines ved to	west of withst	Mont and 10	rose. A tower hold 00 mph winds.	ing the lines was
White County Pangburn	30	0400CST			0	0	4	0	Lightning	
	A l	ightning stri s restored in	ike elimina about 1 h	ited all poviour.	ver in	Pang	burn a	nd wit	hin 4 miles in all di	rections. Power

		TIME			NO. PER	OF SONS	EST!	MATED AGE		JULY
PLACE	Ē	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K-1-mD	- A J Domo		CœOau	CHARACTER OFF STORM	

ARKANSAS Cont'd

Little River County Arkinda

30 1535CST

2

Thunderstorm Winds

Thunderstorm winds downed trees which blocked a county road.

Little River County Foreman

1540CST

Thunderstorm Winds

Thunderstorm winds blew down trees and power lines in a four-block area of Foreman. Fences and some homes were also damaged by the downed trees.

Clark County Arkadelphia

30 1850CST

5

Thunderstorm Winds

A thunderstorm struck Arkadelphia resulting in a major power outage and one death. Most of the damage resulted from the falling of four large oak trees. At least nine homes and one car were damaged by the trees or from falling branches. One tree fell on an enclosed sun porch, killing a woman sitting inside. Another tree fell at an intersection and took down the major electrical and telephone lines serving the eastern half of the city. The damage was confined to a six-block area on the northeastern side of town. At about the same time, Skywarn spotters in the southern part of town reported wind gusts of 35 mph and one-half-inch hail. Damage was estimated at \$250,000. (F65P)

CALIFORNIA, Northern

Madera County **Tuolumne County Tulare County**

1625PDT 1810PDT 1830PDT Flash Flood Flash Flood Lightning

0

Thunderstorms produced heavy rains and frequent lightning. Rainfall amounts of 2.00 to 3.00 inches were common in the high Sierras with roads washed out in Kaiser Pass, Tioga Pass, and Yosemite National Park. Lightning caused one death (male, age unknown) on Mount Whitney.

3

Trinity County Hayfork

1940PDT-18 2015PDT

Hail (1.00)

Thunderstorms in the Trinity Alps produced large hail.

moved from northwest to southeast under clear skies.

Shasta County 5 NW Redding

25 1330PDT

Dust Devil

A dry cold front in the area evidently produced an area of convergence near the surface which in turn produced the dust devil. A roof was severely damaged at a market and witnesses reported a loud roaring noise associated with a compact rising column of air. The dust devil

CALIFORNIA, Southern

San Bernardino County

Daggett

12 1010PST

Thunderstorm Wind (G55)

Strong winds in association with a line of thunderstorms hit the desert areas of southern California.

San Bernardino County
Twentynine Palms 16 1500PST

0

Flash Flood

Thunderstorm Wind (G55) Marble-Size hail

A 30-minute downpour in association with a severe thunderstorm flooded many homes and businesses. There were also damaged roadways. Traffic came to a standstill as water running 3-feet deep poured along city streets.

JULY 1990 NO. OF PERSONS ESTIMATED DAMAGE TIME LENGTH OF PATH LOCAL WIDTH OF PATH CHARACTER PLACE **STANDARD** STORM (MILES) (YARDS)

CALIFORNIA, Southern Cont'd San Bernardino County near Baker ? 16 1515PST 0 Flash Flood Two southbound lanes of Interstate 15 were closed after flash flooding left the highway blanketed in mud and debris. The highway was reopened about two hours later. COLORADO **Summitt County** Near Grays Peak 43 W Denver 01 1300MST Lightning Lightning hit a 36-year-old woman directly in the chest and sent four other hikers to local hospitals. The five were hiking up Grays Peak when a lightning storm came upon them suddenly. The woman suffered burns to her upper body, while the others sustained cuts, contusions, and a shoulder injury. Mesa County Grand Junction 01 1830MST 0 3 Lightning Lightning knocked a hole in the roof of a house located on the northwestern side of Grand Junction. The bolt passed through the roof and entered a bedroom causing only minor damage, yet knocked out the phone and electricity to the house. Douglas County Castle Rock 05 1500MST 0 3 0 Lightning Lightning caused minor damage to a house. **Douglas County** 05 1500MST 3 0 O Lightning Louviers Lightning caused moderate damage to the roof of a house on the north side of Louviers. Douglas County Littleton 05 1510MST 3 Lightning Lightning caused minor roof damage on a house. Larimer County Near Estes Park 0 0 O Hail 06 Afternoon Pea-size hail piled to 6 inches deep along a section of U.S. Highway 36 southeast of Estes Park. Larimer County authorities called out snow plows to clear the highway of hail. El Paso County Colorado Springs 06 1900MST Lightning Lightning was blamed for touching off a blaze which caused \$12,000 in damage to a garage and its contents, including several riding saddles. Larimer County 5 NE Fort Collins 08 0938MST 3 15 0 0 0 0 Tornado (F0)

County sheriff's department reported a small tornado in a vacant field 5 miles northeast of Fort Collins just east of the new Anheuser-Busch Budweiser Brewery. The twister skipped east across open rangeland before dissipating at 1005 MST.

El Paso County Hail (1.50) Colorado Springs 09 1515MST 0

Ping-Pong-size hail was reported by the El Paso County Sheriff and the public near the intersection of Airport Road and Circle Drive on the eastern side of Colorado Springs.

JULY 1990

			TIME			NO.	OF SONS	EST II	AATED	
P	LACE	DADE	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	L L	CHIMOC. 20-	4-00m 00x0 0	NTO DEC	CHARACTER OF STORM

COLORADO Cont'd

El Paso County
Near Simla
Near Calhan
Colorado Springs

09	1630MST 1630MST	0.10 0.10	10 10	0	0	0	0	Tornado (F0) Tornado (F0) Flash Flood
	1640MST			0	0	4	0	Flash Flood

A small tornado touched down in open rangeland near the towns of Simla and Calhan along U.S. Highway 24 in northeast El Paso County. On the northeastern side of Colorado Springs, up to 2 inches of rain fell during an hour's time. The heavy downpour flooded a number of roads and intersections causing minor property damage.

El Paso County 10 S Colorado Springs

09 1615MST

0 1 2 0 Lightning

Lightning injured a Montana National Guardsman training at the Fort Carson Army Installation 10 miles south of Colorado Springs. The man, age 23, suffered minor injuries after lightning hit a military vehicle and shocked him as he reached for the radio.

El Paso County Near Fountain

09 1717MST

0 0 4 0 Flash Flood

As much as 1.75 inches of rain fell within a very short time along Fountain Creek 12 miles south of Colorado Springs. The creek crested over its banks just inside the town of Fountain. High waters washed away a truck and portions of an adjacent highway.

El Paso County Fountain

09 1800MST

0 1 0 0 Lightning

A 41-year-old man suffered a cardiac arrest and sustained numerous burns when lightning either hit the victim or a nearby object. The man had just walked outside to inspect for water damage to the roof on his house when lightning struck.

Adams County Commerce City

09 1800MST 0.25 20 0 0 0 0 Tornado (F0) 1800MST 0 0 5 0 Flash Flood

A severe thunderstorm moved northeast across the Denver metropolitan area and intensified rapidly over northeastern Denver and Commerce City, where it dumped 1.34 inches of rain at Denver's Stapleton International Airport between 1700 MST and 1830 MST. The public reported as much as 4 inches of rainfall in 20 minutes near the South Platte River on the southwest side of Commerce City just after 1800 MST. The South Platte rose quickly above its banks flooding adjacent lowlands. The raging flood waters caused extensive damage to a 30-foot stretch of railroad track embankment, destroyed a railroad trestle and a nearby garage, and washed away a vintage 1960s show car near east 58th Avenue and York Street. The car was found a couple of miles downstream in a pool of deep mud and murky water.

Lightning was blamed for a number of power outages across the Denver metropolitan area that evening affecting, at one point, as many as 7,000 public service customers.

The same thunderstorm produced a brief tornado at 1800 MST in a vacant field near 64th Avenue and Tower Road, 5.5 miles northeast of Stapleton Airport just east of the Rocky Mountain Arsenal. Police reported no damage to the area.

Front Range

11 1200MST-1530MST

0 60 9 0 Hail (2.75)

The worst hailstorm ever experienced in Colorado in terms of damage battered many portions of the Front Range from Estes Park to Colorado Springs. The latest damage tally had nudged to \$625 million, making this hailstorm the most costly in American history. The hailstorm cut a 5- to 10-mile-wide swath along a south-southeast line from just southeast of Estes Park to the northeastern side of Colorado Springs. Hardest hit areas were: southeastern Boulder County, the Jefferson County Airport (13 miles northwest of Denver), Arvada, eastern Wheat Ridge,

JULY 1990

		TIME			NO.	OF SONS	EST!	MATED AGE	
PLACE	D-E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	Comp.	CHIZCLE.		NTOCOLO	CHARACTER OF STORM

COLORADO Cont'd

southwestern and south-central Westminster, western Thornton, northwestern, west-central, and downtown Denver, northeastern and east-central Lakewood, just east of Littleton, portions of Arapahoe County west of Interstate 25, and northern and central Douglas County near Castle Rock and Franktown.

Golf ball-size to baseball-size hail severely damaged roofs on thousands of homes and buildings along the storm's path, battered tens-of-thousands of automobiles, windows, signs, street lights and traffic signals, stripped paint, awnings, and trim from buildings, punched holes in the roofs of a couple of homes in the Arvada area, knocked out power and phone service for several hours to thousands of public service customers, defoliated thousands of trees, ripped up greens and fairways on a number of local golf courses, and severely damaged several aircraft tied down at the Jefferson County Airport; to name only some of the major damage reported.

By far the worst effects of the storm were in northwestern, west-central, and downtown Denver, and in the northwestern Denver metropolitan area suburb of Arvada. Hail the size of baseballs fell for several minutes near the intersection of 53rd Avenue and Wadsworth Boulevard in old town Arvada. Minutes later, golf ball-size hail and heavy rain pummeled two northwestern Denver amusement parks for several minutes catching park officials and patrons completely off guard. Hardest hit was the Elitches Amusement Park near the intersection of 38th Avenue and Tennyson Street. The unyielding storm sent 47 people from the amusement park to local hospitals for treatment of bumps, cuts, and bruises. Many of them were caught with no shelter when power failed, holding them hostage on rides during the storm.

Hail clogged storm sewers causing rain water to back up 3- to 6-feet deep on several roads and intersections in the Arvada area. Several basements were flooded as well. In some spots hail was washed into drifts several feet deep.

SIGNIFICANT SEVERE WEATHER REPORTS FROM THE JULY 11 FRONT RANGE HAILSTORM.

Larimer County

1150MST

Dime- to quarter-size hail was reported by the public in Big Thompson Canyon 10 and 18 miles west of Loveland.

Boulder County

1230MST

Dime- to quarter-size hail piled to 3 inches deep along Colorado Highway 7, 5 miles west of Lyons.

Boulder County

1240MST

Dime-size hail was reported on the northeastern side of Boulder.

Boulder County

1251MST

A National Weather Service employee reported 1-inch-diameter hail on Boulder's southwest side near NOAA's Environmental Research Laboratory (ERL).

Boulder County

1305MST

The public reported 1-inch-diameter hail in Louisville, 8 miles southeast of Boulder.

Jefferson County

1305MST

One to 1.5-inch-diameter hail was reported at the Jefferson County Airport 13 miles northwest of downtown Denver.

Jefferson County

1310MST

Baseball-size hail was reported at 53rd Avenue and Wadsworth Boulevard in old town Arvada.

		TIME			NO.	OF SONS	ESTIN DAMA	AATED GE		JULY 1
PLACE	D A E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K-1-mD	CHASC LE	4-cam 00:0 0	WTOWO	CHARACTER STÖRM	
COLORADO C	ont'd	1317MST			1	ļ <u>.</u>		<u> </u>		

Adams County

1317MS1

A National Weather Service employee reported dime- to quarter-size hail in west Thornton near 97th Avenue and Pecos Street.

Denver County

1330MST

Quarter- to golf ball-size hail and heavy rain was reported by police and the public at the Elitches and Lakeside amusement parks in northwest Denver.

Denver County

The police and public reported quarter- to golf ball-size hail pounding portions of west-central and downtown Denver.

Arapahoe County

1356MST

Quarter-size hail was reported two miles east of Littleton in western Arapahoe County.

Elbert County

1415MST

Dime-size hail was reported by the public just west of Elizabeth in western Elbert County.

Douglas County

1416MST

Dime- to Ping-Pong-size hail was reported by the public 2 miles east of Castle Rock and just west of Franktown.

Douglas County

1422MST

A spotter measured 1 inch of rain in Castle Rock in just 10 minutes.

El Paso County

1500MST

Hailstorm moved across the northeastern corner of Colorado Springs between 1500 MST and 1530 MST, leaving behind pea-size hail and from 1.00 to around 1.34 inches of rain.

Jefferson County Lakewood

11 1340MST 0.10 0 Tornado (F0)

A small tornado touched down near the intersection of 6th Avenue Freeway and Kipling Boulevard. The twister briefly dropped down during the above-mentioned hailstorm, but reportedly caused no damage.

Douglas County Castle Rock

11 1415MST 0.50 5 Tornado (F1)

Castle Rock Police reported heavy damage to some homes and vehicles in the Founders Village housing development near Ridge Road. This twister was spawned by the same storm that bombarded the Denver metropolitan area with golf ball- to baseball-size hail.

San Juan County 35 NNW Durango

14 0700MST

1 0 0 Lightning

A 35-year-old man was killed and his fiancee seriously injured when struck by lightning. While camping near Molas Lake 5 miles southwest of Silverton, the couple had just set off on a hike when a thunderstorm came up suddenly. (M35CA)

Arapahoe County Aurora/Buckley Air National Guard Base

14 1718MST

Thunderstorm Wind (G50)

									JULY 1	990
		TIME		,	NO. PER	SONS	ESTI! DAM/	MATED AGE		
PLACE	D O	STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K-LEED	Omacc. 20	- 	WTORO	CHARACTER STORM	
COLORADO Co	nt'd						-	-	· · · · · · · · · · · · · · · · · · ·	
Baca County 5 S Pritchett	14	1740MST	0.20	15	0	0	0	0	Tornado (F0)	
	Cor dar	unty sheriff nage was ob	s departm served.	ent report	ed a	small	tornac	lo on	the ground for a few minutes.	No
El Paso County Black Forest	19	1822MST			0	0	0	0	Hail (1.00)	
Elbert County 10 NE Simla	20	1140MST			0	0	0	0	Hail (1.00)	
Conejos County 32 SW Alamosa Near Mogote	20	1150MST	1.5	15	0	0	4	0	Tornado (F0)	
	Ala San	mall twister mosa. The Luis Valley witness acco	town sits. The tw	l a row of t at approximite at approximiter was i	rees j matel repor	ust ou y 7,90 tedly	utside t 00 feet on the	the tow above ground	on of Mogote, 32 miles southwes sea level on the southern end of d for about 30 minutes according	t of the g to
El Paso County 25 NE Colorado Springs	20	1205MST	4.0	25	0	0	0	0	Tornado (F0)	
	A s twi eas	storm spotte ster tracked t of Peyton	r reported north over at 1230 M	l a tornado r open rang IST.	o on gelan	the gr I appr	round roxima	8 mile tely 4	s southwest of Calhan. The sn miles when it was again spotted j	nall just
El Paso County 6 NNE Calhan 1 E Payton	20 20	1305MST 1305MST	1.0 0.10	15 15	0	0	0	0	Tornado (F0) Tornado (F0)	
	No nor	damage was theastern El	s reported Paso Cou	after both inty.	twis	ters n	noved	across	the sparsely inhabited rangeland	l in
El Paso County N Colorado	20	12401407			^	^		0	H-3 (1.25)	
Springs N Colorado	20	1340MST 1358MST			0	0	4	0	Hail (1.75) Hail (1.00)	
Springs 18 N Colorado Springs		1400MST			0	0	0	0	Hail (0.75)	
-19-	fro	e public repo	golf ball	-size hail.	the i	north	side of	Color	ado Springs sustained minor dam observed in the town of Monum	age ent
Arapahoe County Littleton	20	1400MST		· .	0	0	4	0	Flash Flood	
	fell to i	ved northeas in less than residential st	t across the 30 minut reets, cur ter, when	es. The destance of the destan	ash flo eluge dewal ers ar	cause ks. I d dra	g hit se ed Dry Nearly inage (ctions Creek 100 v ditches	metropolitan area as thunderstor of Littleton after 1.20 inches of a to jump its banks, causing dam ehicles were stranded for a time became choked with debris and ections.	ain age in
El Paso County 5 W Calhan	20	1405MST	0.10	10	0	0	0	0	Tornado (F0)	

A brief tornado was reported on the ground by the public near Calhan, 22 miles northeast of Colorado Springs.

	T			T	I NO	OE.	ESTIN	MATER		JULY 1990
		TIME			PER	SONS	ESTIM DAMA	GE	et e	
DIACE	D	LOCAL	LENGTH OF PATH	WIDTH OF PATH	Ķ	Ņ	R	CR	CHARACTER	
PLACE	É	STANDARD	(MILES)	(YARDS)	E	DATE		CECOOL	STORM	
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	D	Ĕ			•	
			<u> </u>	L	<u> </u>	l			·	
COLORADO Co	nt'd									,
Crowley County Ordway	20	1500MST			0	0	0	0	Thunderstorm W	ind (G52)
Las Animas County 42 E Trinidad	20	1530MST			0	0	0	0	Thunderstorm W	ind (G56)
	The	e public rep	orted a thu	ınderstorm	wind	l gust	to 64	mph 10	0 miles southeast o	f Pinon Canyon.
Otero County										
La Junta El Paso County	20	1532MST	•		0	0	. 0	0	Hail (1.50)	
5 W Colorado Springs	20	1540MST			0	0	0	0	Hail (1.75)	
Otero County		10 10/101			Ŭ,					··
10 W La Junta	20	1600MST 1600MST			0	0	4 5	7 4	Hail (1.75) Flash Flood	• •
	Hea	ayy rains ar	nd large ha	ail left <u>a</u> w	/ide s	wath	of pro	perty a	and crop damage fr	om Rocky Ford
	sou in t	itheast acros the Denver a	s Otero Co irea earliei	unty. The that aftern	same 100n,	weat.	her sys uced th	tem tha e thun	at produced the dest derstorm that dropp	ructive hallstorm sed dime- to golf
	ball	l-size hail ar La Junta.	nd 3.50 inc	ches of rair	ı in le	ss tha	un an h	our ne	ar the town of Swin	k, 10 miles west
	sev	eral fish hol	lding pond	ls. The pri	vatel	y owi	ned fish	ı farm	leasing a wall of m (west of the town of	nuddy water into of Swink) lost an
		mated \$50,0	-	-						
	wip	ped out by	the hail ai	nd heavy r	ains.	Coi	inty of	ticials	of various types, a estimated that a g	ood 25% of the
	Ark mil	cansas Rivei lion.	Valley m	elon crop	was l	ost.	Crop lo	osses w	ere estimated between	een \$10 and \$20
Baca County										
Springfield	20	1730MST		-	0	0	0	0 .	•	
	A t	hunderstorn oding in the	n dropped southeast	1.80 inche ern Colora	es of do to	rain a wn of	nd sma Spring	all hail gfield.	in 45 minutes, car No damage was r	ising local street eported.
Otero County	20	1732MST			Δ	٥	0	0	Unil (1 50)	
5 SW La Junta	20	17321131		٠	0	0	0	U	Hail (1.50)	
Las Animas County 18 NW Trinidad	21	1315MST			0	0	2	0	Hail (1.00)	
	Qua the	arter-size ha town of Ag	il stones v guilar.	vere blame	d for	knoc	king ou	at wind	lows on a house 1 i	mile southeast of
Kiowa County 31 NE Lamar	23	1605MST			0	0	0	0	Hail (1.50)	

Marble- to dime-size hail stones covered the ground to an inch deep on the city's south side.

0.

The Colorado State Patrol reported golf ball-size hail 3 miles east of Sheridan Lake along State Highway 96.

0

Hail (0.75)

Pueblo County Pueblo

23 1810MST

	Τ			T	l NO	OF	FOTIN	ATED	JULY 1990
		TIME	154674		PER	SONS	ESTIM DAMA		
PLACE	P	LOCAL STANDARD	LENGTH OF PATH	WIDTH OF PATH	1	Ì		C&O50	CHARACTER OF STORM
	Ė		(MILES)	(YARDS)) BEE	-compo	Š	STORM
			· 			<u> </u>	Ÿ		
COLORADO Co	nt'd								
El Paso County									
N Colorado Springs 2N Colorado	27	1530MST			0	0	0	0	Hail (1.75)
Springs NE Colorado		1546MST			0	0 -	0	0	Hail (1.00)
Springs Black Forest 18 N Colorado		1551MST 1555MST			0	0	0	0	Hail (0.75) Hail (1.00)
Springs 5 E Black Forest Elbert County		1620MST 1650MST			0	0	0	0	Hail (1.75) Hail (1.75)
Kiowa Lincoln County	27	1547MST			0	0	0	0	Hail (1.75)
5 S Limon 10 SW Limon	27	1651MST 1653MST			0	0	0	0	Hail (0.75) Hail (1.75)
5.5 SW Limon		1710MST		•	0	ŏ	ŏ	ŏ	Hail (1.00)
Larimer County 30 NW Fort									
Collins S Fort Collins	28	1130MST 1420MST			0	0	0	0	Hail (0.75) Hail (0.75)
	Dir Col	ne-size hail llins, and as	blanketed much as	the ground the first design that the first the	nd are	ound n the	Red Fo	eather side of	Lakes 30 miles northwest of Fort Fort Collins.
Weld County 5.5 NW Greeley 2.5 W Greeley	28	1402MST 1421MST			0	0	0	0	Hail (0.75) Hail (0.75
Pueblo County Pueblo	30	1910MST 1910MST			0	0	5 0	0	Hail (0.75) Heavy Rain
	Pea Rai	- to dime-si: nfall amoun	ze hail cau ts ranged	sed minor from 1.16	dama to 2.	ge to : 20 in	several ches.	cars a	nd trees on the south side of Pueblo.
CONNECTICUT	1								
Tolland County	20	2000EST- 2100EST			0	0	0	0	Thunderstorm Winds
	Thu and	inderstorm v Coventry.	winds gust Power wa	ing to an e as disrupte	stima d to a	ted 50 about	mph k 3,000	nocke electri	d down trees and limbs in Mansfield c customers.
DELAWARE			·						
Sussex County Laurel Gumboro	01	1600EST-							
,	-1	1630EST			0	0	0	0	Thunderstorm Winds
	Stat Gui	te police re mboro.	ported that	at high w	inds	down	ed tree	s and	power lines between Laurel and
New Castle County 2 SE Meadowood Newark	05	1515EST 1525EST			0	0	0	0	Hail (0.75) Hail (0.75)

Dime-size hail was reported at both locations.

JULY 1990

		· ·			NO.	OF	ESTI	MATED		JULY 1990
		TIME	1 5410711		PER	SONS	+	MATED AGE		
PLACE	D A E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	D L	OTTOCCE		Cecoera	CHARACTER OF STORM	
DELAWARE Co	nt'd									
New Castle County Newport	05	1515EST			0	0	3	0	Lightning	
	Lig	htning caus	ed fires th	at destroye	ed a n	nobile	e home	and d	lamaged a house.	
Kent County 2 SW Farmington	10	1920EST			0	0	3	0	Thunderstorm Wind	s
	For ove	ur residence erturned. So	s were dan ome tree li	naged, a r mbs were	nobile down	e hon led.	ne was The da	destro	oyed, and another mobi pattern indicated a dow	ile home was mburst.
Sussex County North Shores	19	1230EST			2	0	0	0	Lightning	
	Sho	e man was s ores. Anoth d the next d	er man wa	lking with	y ligh him v	itning was s	and k eriousl	illed w ly injur	while walking on the be red by the same bolt of	ach at North lightning and
Sussex County Dewey Beach	21	Evening			1	0	0	0	Lightning	
	A r	nan was kil	led by a li	ghtning bo	lt wh	ile si	tting o	n the t	beach. (M290)	*
FLORIDA										
Sarasota County Myakka St. Park	01	1300EST.			0	0	1	3	Thunderstorm Wind	
	Tre	es were blo	wn down.							
Sarasota County Venice	01	1305EST			0	0	0	0	Tomado (F0)	
	A t	ornado touc	hed down	briefly.						
Marion County Ocala	01	1415EST			0	0	3	0	Thunderstorm Wind	s
	Tre	es and limb	s were blo	wn down.	Two	o veh	icles s	ustaine	d damage.	٠
Highlands County Desoto Sebring	01 01	1445EST 1445EST			0	0	4	0	Lightning Thunderstorm Wind	S
	A n dan	nobile home	in Desoto understorn	was destro	oyed	by a l	lightni	ng-initi	iated fire and a home in	Sebring was
Brevard County Merritt Island	01	1500EST			0	0	4	0	Thunderstorm Wind	8
	Thu	understorm	winds blev	v a tin roo	f off	a con	nmerci	al buil	ding which then collaps	sed.
Hillsborough County Plant City	01	1547EST			0	0	3	0	Thunderstorm Wind	S

Volusia County
New Smyrna Beach 01 1600EST

0 0 3 0 Thunderstorm Winds

A beach concession was destroyed and a lifeguard stand damaged by a thunderstorm wind gust.

Thunderstorm wind gusts damaged two mobile home roofs and downed trees and power lines.

	1	r —	I	T	T 110	05	LECTIV	ATED	JUI	LY 1990
		TIME			PER	SONS	ESTIM DAMA			
PLACE	D	LOCAL	LENGTH OF PATH (MILES)	PATH (YARDS)	Omer	OHIDOCL 25	4-0am 00a u	COOD	CHARACTER STORM	
W OPP A G . 41	1		<u> </u>		<u> </u>	,	L			
FLORIDA Cont'e Polk County Lake Wales	a 01	1700EST			0	0	3	0	Thunderstorm Winds	
Lake Wales			ised minor	r damaoe t	•	-	<u>-</u> .	•	and blew over large trees. I	Pehhle-
	size	hail was o	bserved.	**********					and old old large trees.	•
Monroe County Big Pine Key	01	1835EST							Waterspout	
	A p	oilot reporte	d a waters	spout.						
Lee County Ft. Myers Beach	02	0920EST						•	Waterspout	
	The	e Coast Gua	ird reporte	d a waters	pout.				e.	
Lee County Ft. Myers	02	1015EST			0	1	0	0	Lightning	
	An	airport lugg	gage handl	er was inj	ured l	by a t	olt of	lightni	ng that struck a nearby ramp)• .
Manatee County Bradenton	02	1130EST	Short		0	0	0	0	Waterspout - Tornado (F0)	
	Αv	waterspout 1	noved ons	hore from	Mana	itee R	liver do	wning	a large tree and power lines	5.
Alachua County Gainesville	02	1200EST			0	0	0	0	Thunderstorm Winds Hail (0.75)	
	Tre	es were blo	wn down	and three-o	uarte	er-incl	h hail v	vas rer	, ,	
Collier County 5 SW Naples	02	1230EST			1		-		Waterspout	
	The	e Coast Gua	rd reported	d a waters _l	pout.					
Monroe County Big Coppitt Key	02	1336EST							Waterspout	
	Αv	vaterspout v	vas reporte	ed.						
Broward County Ft. Lauderdale	02	1340EST			0	0	3	0	Lightning Thunderstorm Winds	
	A 1:	ightning bo	lt destroye	d the cupo	la of	a hou	ıse. Si	x trees	were uprooted.	
Brevard County		4.40077977	•	•	_				•	
2 W Cape Canaveral		1400EST		ii	0	1	0 :ahtm:m	0	Lightning	
Collier County			male was s	seriously ii	_	-	_		e fishing in an open boat.	
Golden Gate		1430EST			0	0.	3		Thunderstorm Winds	
Datas David Co.	A p	orch was d	amaged an	a trees we	re blo	own d	own.			
Palm Beach County Jupiter West Palm Beach	02 02	1430EST 1430EST			0	1 0	0 3	0	Lightning Lightning	

A gardener in Jupiter was injured by a lightning strike. A lightning- initiated fire in West Palm Beach caused \$1,000 damage to a house.

JULY 1990

		TIME			NO. PER	OF SONS	EST!!	MATED	
PLACE	Đ	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	Ř.	CHINDCLE	4- 22 00.00	COROLIN	CHARACTER STORM

FLORIDA Cont'	d													
Duval County Jacksonville	02	1435EST	•		0	0	0	0	Thunderstorm Wind (G60) Hail (0.75)					
	Pea	ık wind gusts	of 60 kno	ts and th	ree-q	uarter	-inch	hail w	ere observed at the airport.					
Volusia County Daytona Beach	02	1500EST	·	* "	0	0	3	0	Thunderstorm Winds					
	The roof of a carport was damaged by thunderstorm gusts.													
Jackson County Marianna	02	1700EST			0	0	0	0	Thunderstorm Winds					
	Tre	Trees were blown down.												
Jefferson County Monticello	02	1730EST			0	0	0	0	Thunderstorm Winds					
	Lar	ge tree branc	hes were b	lown do	wn.									
Walton County Defuniak Springs Defuniak Springs Defuniak Springs	02 02 02	1730EST 1750EST 1945EST		13	0	0	0 0 4	0 0	Hail (1.00) Thunderstorm Winds Lightning					
÷	Thu ligh	understorm w ntning-initiate	vinds down	ed trees \$10,000	and dama	power to	r line a 100	s and - year-	quarter-size hail was observed. A old house.					
Okaloosa County Ft. Walton Beach Destin	02 02	1750EST 1750EST			0	0	0	0	Thunderstorm Winds Lightning					
	Thr inju	ree trees were ired by lightr	e uprooted iing while	by thun entering	derst his v	orm g ehicle	gusts i	n Ft. '	Walton Beach. A Destin man was					
Santa Rosa County Navarre Beach	02	1940EST	Short		0	0	3	0	Tornado (F0)					
	Αv	acant camper	r was dama	iged by a	a brie	f torn	ado to	uchdo	wn.					
Santa Rosa County Bagdad	03	1630EST	Short		0	0	0	0	Tornado (F0)					
	A t	ornado touch	ed down b	riefly wi	th no	appa	rent da	amage.	•					
Okaloosa County Eglin AFB	03	1520EST		•	0	0	0	0	Thunderstorm Wind (G50)					
	A v	wind gust to 5	50 knots w	as meast	ired.									
Okaloosa County Niceville	03	1525EST			0	0	Ó	0	Hail (1.00)					
	Thr	ree-quarter to	one-inch-s	size hail	was 1	reporte	ed.							
Broward County Pompano Beach	03	1700EST			0	0	. 3	0	Thunderstorm Winds					
	Αc	oncrete wall	and house	shutters	were	dama	ged by	y wind	gusts.					

290

PLACE	D	TIME LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE			JULY 199	
					K L L ED	Ontage 2	P.000.W00-Y	CROPA	CHARACTER STORM		
FLORIDA Cont'o	1	·	-								
Madison County Pinetta	03	1800EST	Short		0	0	0	0	Tornado (F0)		
	A brief tornado touchdown twisted trees and took down tree limbs and power lines.										
Broward County 1 E Ft. Lauderdale	04	0800EST							Waterspout		
	A waterspout was photographed just offshore.										
St. Lucie County Ft. Pierce	04	1915EST		,	0	0	3	0	Thunderstorm Winds		
	A house roof was damaged, tree limbs blown down, and light aircraft overturned.										
Broward County Sunrise Tamarac Cooper City	05 05 05	1415EST 1425EST 1520EST			0 0 0	1 0 0	0 5 0	0 0 0	Lightning Lightning Thunderstorm Winds Hail (0.75)		
	A Sunrise policeman was injured by a nearby lightning strike as he entered his vehicle. A house in Tamarac suffered \$50,000 damage from a lightning-initiated fire. Wind gusts downed tree limbs and three-quarter-inch hail was reported in Cooper City.										
Collier County 4 SE Immokalee	06	1615EST			0	0	2	0	Hail (1.25)		
	Golf ball-size hail broke a few windows.										
Hendry County LaBelle	06	1920EST							Funnel Cloud		
	Sev	Several funnel clouds were sighted.									
Pinellas County Seminole	07 1400EST					0	4	0	Thunderstorm Winds		
	Αı	oof sustaine	ed \$10,000	damage f	rom a	thun	dersto	rm dov	vnburst.	•	
Polk County Lakeland Pasco County Land of Lakes	07	1622EST			0	0	0	0	Hail (0.75)		
	07	7 1650EST			0	0	0	0	Hail (0.75)		
Polk County Lakeland	07	1715EST			0	0	0	0	Tornado (F0)		
	A tornado touched down briefly.										
Hillsborough County Sun City Center	07	1715EST			0	0	1	1	Thunderstorm Wind		
	A tree and shed were blown down. Hail and funnel cloud.										
Pineallas County Safety Harbor		1830EST			0	0	0	0	Thunderstorm Wind ((G70)	
	Wind gusts to 80 mph and hail measured 0.40 inch.										
Hillsborough County Tampa	07	1900EST			0	. 0	4	0	Thunderstorm Wind		

Power lines were downed.

		<u> </u>		Γ	NO.	OF	ESTI	MATED T		JULY 1990
	٧.	LOCAL	LENGTH	UINTH	PER	SONS		MATED AGE		
PLACE	D-E	STANDARD	LENGTH OF PATH	WIDTH OF PATH	Ì	Ŋ	-comoo	00000	CHARACTER OF STORM	
	E		(MILES)	(YARDS)	<u>[</u>	OmraCL.W	Ę	S	STORM	
· .			·			5	¥			_
										-
FLORIDA Cont'o	1						٠			·
Pacso County Port Richey	08	1530EST			0	0	0	0	Hail (0.25)	
Lee County Cape Coral	09	1340EST			0	0	3	0	Thunderstorm V	Vinds
	A s	screened poo	ol enclosur	e was blow	<i>v</i> n av	vay.				
Lee County Bonita Springs	09	1345EST			0	1	0	0	Lightning	
	A 2	20-year-old	construction	on worker	was l	nit by	lightn	ing and	d thrown 7 feet into	o the air.
Hillsborough County		1000E0T			•		^	•	***	
Tampa	09	1700EST			0	1	0	0	Lightning Hail (1.25) Funnel Cloud	
	A 3	8-year-old	paramedic	was injured	d by a	light	ning st	triķe. (Golf ball-size hail a	nd a funnel cloud
		re observed.	•	_						
Hillsborough County Tampa	09	1717EST			0	0	0	0	Hail (1.50)	
Pinellas County St. Petersburg Clearwater	09 09	1730EST 1835EST			0	0	0	0	Hail (1.25) Thunderstorm W	lind (G60)
Cian water			hail was to	norted at 9	•			•	oast Guard measur	, ,
•	gus	ts in Cleary	vater.	ported at t	JL. 1 C	101301	ng am	u me c	oast Guard measur	ca oo khot whia
Hernando County Brooksville	09	1740EST			0	0	3	0	Thunderstorm W	/ind
DIGGESTING		ver lines we	ere downed	1.	•		•	Ū	Thundside in	
Collier County	10,	voi illios vi								
Collier County Marco Island	10	1300EST			0	1	0	0	Lightning	
	A 3	4-year-old	man walki	ng on the	beach	was	injure	d by lig	ghtning.	
Taylor County Perry	10	1500EST	,		0	0	0	0	Thunderstorm W	/inds
	Nu	merous tree	s were dov	vned.						
Sarasota County							_	_		
Sarasota	10	1620EST		_	0	0	. 3	0	Thunderstorm W	/ind
	Pov	ver lines we	ere downed	i.						
Manatee County Bradenton	10	1624EST		•	0	0	2	0	Thunderstorm W	/ind
	Pov	ver lines we	ere downed	l.						
Hardee County Wauchula Hills	10	1754EST			0	. 0	4	0	Lightning	

A lightning-initiated fire destroyed a mobile home.

_			 		Γ	l NO	OE.	ECTI	MATER		JULY 1990
1			TIME	LENOTH		PER	SONS		MATED AGE		
	PLACE	P	LOCAL STANDARD	LENGTH OF PATH	WIDTH OF PATH	}	ļ	Dec Opmes	W.40.28C	CHARACTER OF STORM	
	·	-		(MILES)	(YARDS)	Ē	D BE	E R	S	31064	
L		<u> </u>	<u> </u>	34	<u> </u>	<u> </u>	<u> </u>	<u> </u>	L		
F	LORIDA Cont'd	1									
	illsborough County Tampa	10	1800EST			0	0	4 4	0	Thunderstorm Wind Lightning	İs
		Thu	understorm irch steeple	winds dan causing \$1	naged a ho 2,000 dan	ouse nage.	roof a	ınd scr	eened	porch. A lightning b	polt toppled a
	itrus County	10	2000EGE			^	^	^	•	The 1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	
,	Lecanto		2000EST			0	0	Ò	3	Thunderstorm Wind	
	11° G	Tre	es were dov	vnea.							
P	ranklin County Carrabelle	11	0430EST			0	0	4	0	Lightning	
		A t	hree-bedroo	m frame h	ouse was	comp	letely	destro	yed by	a lightning-initiated (fire.
B	revard County										
	2 E Cape Canaveral	11	1055EST	· .					•	Waterspout	
		A s	short-lived v	vaterspout	was obser	ved o	offsho	re Cap	e Cana	weral.	
L	evy County Chiefland	11	1400EST			0	1	2	0	Lightning	
		Lig	htning enter	red an offic	e through	a con	nputer	cable.	dama	ged a desk, and injured	a man sitting
		at i	t.				•	•	'	, ,	· ·
S	rasota County Englewood	11	1400EST			0	0	3	0	Thunderstorm Wind	ls
		A s	creened por	ch enclosu	re was hea	vily	dama	ged by	thund	erstorm wind.	•
Pi	nellas County					_		_	_		
Po	Clearwater olk County	11	1630EST			0	0	0	0	Hail (0.75)	
]	Mulberry		1639EST	Short		0	0	3	0	Tornado (F0)	
		At	orief tornado	touchdov	n took the	roo	f off a	mobil	le hom	e.	
H	ernando County Brooksville	11	1640EST	Short		0	.0	3	0	Tornado (F0)	
		Αŀ	ouse roof v	vas heavily	damaged	and	two o	utbuild	lings v	vere damaged.	
H	illsborough County			·						•	
	Sefner	11	1730EST			0	0	0	0	Hail (1.00) Thunderstorm Wind	ls
		Nic	kel-size hai	l was repo	rted and tr	ees a	nd po	wer lii	nes we		
Pa	sco County			-		_	•				•
,	West portion	11	1830EST			0	0	3 0	0	Lightning Thunderstorm Wind	ls
		Lig	htning dama	aged a hou	se and son	ne tre	es an	d powe	er line	s were downed.	
V	olusia County West portion	12	1545EST			0	0 .	0	0	Thunderstorm Wind	ls

Numerous trees were blown down.

	TIME			NO.	OF SONS	ESTIM DAMA	ATED	JULY 199
PLACE	D LOCAL T STANDAR	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K-Li-BED	OHIOC CAN	-сошоо	CROPS	CHARACTER OF STORM
FLORIDA Cont'	d							
Alachua County Alachua	12 1630ES	5 T		0	0	5	0	Lightning
	Three town	houses were	destroyed l	y ligi	htning	g-initia	ted fire).
Hernando County Spring Hill	12 1700ES	ST		0	0	3	0 -	Lightning
	Two houses	suffered min	nor damage	fron	ligh	tning-i	nitiated	fires.
Polk County Mulberry	12 1715E	ST		0	0	3	0	Thunderstorm Winds
	A trailer wa	is damaged b	y a large t	ree lir	nb blo	own do	own by	the thunderstorm.
Union County Lake Butler	12 1740E	ST Short		0	.0	0	0	Tornado (F0)
	The Civil D	efense repor	ted a brief	torna	do to	uchdov	vn, cau	sing some damage to trees.
Palm Beach County 1 E Palm Beach	13 0800E	ST	•					Waterspout
	A waterspor	ut was report	ed offshore	e Paln	n Bea	ch.		
Manatee County Terra Ceia Anna Maria	14 0800E	ST		0	0	3	0	Waterspout Tornado (F0) Thunderstorm Winds
	Ten telepho near Anna l	ne poles wer Maria.	e snapped	in hal	f near	Terra	Ceia a	and a house and roof were damage
Pasco County New Port Richey	Ten telephonear Anna I	Maria.	e snapped	in hal O	f near	Terra	Ceia a	waterspout Tornado (F0)
Pasco County New Port Richey	near Anna l 14 0920Es A waterspo	Marīa. ST Short	shore from	0	0	5	0	Waterspout
Pasco County New Port Richey Sarasota County Venice	near Anna l 14 0920Es A waterspo	Maria. ST Short ut moved or,000 damage	shore from	0	0	5	0	Waterspout Tornado (F0)
New Port Richey Sarasota County	14 0920E3 A waterspo causing \$75 14 0930E3	Maria. ST Short ut moved or,000 damage	shore fron	0 the	0 Gulf 0	5 of Me	0 exico a 0	Waterspout Tornado (F0) nd ripped roofs off several house
New Port Richey Sarasota County	14 0920E3 A waterspo causing \$75 14 0930E3	Maria. ST Short ut moved or,000 damage ST ler awning w	shore fron	0 the	0 Gulf 0	5 of Me	0 exico a 0	Waterspout Tornado (F0) nd ripped roofs off several house Thunderstorm Winds
New Port Richey Sarasota County Venice Broward County Pembroke Pines	14 0920E3 A waterspo causing \$75 14 0930E3 A large trai 14 1300E3 14 1430E3 Four people	Maria. ST Short ut moved or ,000 damage ST ler awning w ST e were injure picnic tables	ashore from vas blown i	On the Onto se	O Gulf O everal 4 O erstor	5 of Me 4 vehicl 3 0	O es caus O o o o o o o o o o o o o o o o o o o	Waterspout Tornado (F0) Ind ripped roofs off several house Thunderstorm Winds Thunderstorm Winds Thunderstorm Winds
New Port Richey Sarasota County Venice Broward County Pembroke Pines	A waterspocausing \$75 14 0930E3 A large trai 14 1300E3 14 1430E3 Four people people into	Maria. ST Short ut moved or,000 damage ST ler awning w ST e were injure picnic tables ale.	ashore from vas blown i	On the Onto se	O Gulf O everal 4 O erstor	5 of Me 4 vehicl 3 0	O exico a O es caus	Waterspout Tornado (F0) Ind ripped roofs off several house Thunderstorm Winds Sing \$10,000 damage. Thunderstorm Winds Thunderstorm Winds Thunderstorm Winds Thunderstorm Winds Thunderstorm Winds

Palm Beach County 5 E Palm Beach

16 0910EST

Waterspout

A waterspout was reported offshore Palm Beach.

A lightning-initiated fire caused \$50,000 damage to a condominium.

						_		,	,	JULY 1	00n
		TIME			NO.	OF SONS	EST!	AGE		0021 1	,,,
PLACE	D&	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K-1-MD	CHIMACLE	←-∞mmoco æ o	COROCTA	CHARACTER OF STORM		
FLORIDA Cont'd	1										
Hillsborough County Sun City Center	16	1800EST	Short		0	0	4	0	Tornado (F0)		
•	Tw	o houses an	d a drug s	tore were	dama	ged b	y a bri	ef torn	ado touchdown.		
Dade County 1 E Miami Beach	17	1200EST	J				-		Waterspout		٠
	The	Beach Pati	rol reporte	d a waters	pout	offsho	ore Mi	ami Be	-		
Sarasota County 10 SE Sarasota	17	1615EST	1.0	10	0	0	4	0	Tornado (F0)		
	Wir	ndows were	blown ou	t of houses	s and	appli	ances 1	moved	up to 50 feet.		
Hillsborough County Sun City Center	17	1800EST			0	0	. 3	Ó	Thunderstorm Win	ds	
	Tre	es and pow	er lines we	ere downed	and	a cor	nmunit	ty build	ling roof and siding	lamaged.	
Escambia County Pensacola	18	1330EST			0	0	0	0	Hail (0.75)		
	Din	ne-size hail	was repor	ted.					•		
Hillsborough County Riverview	18	1600EST			0	0	4	0	Thunderstorm Win	ds	
	Sev	eral trees w	ere downe	d includin	g one	that o	caused	\$10,00	00 damage to a car an	d pumphou	se.
Pinellas County Safety Harbor	18	1630EST			0	0	0	0	Thunderstorm Win	d (G50)	
	Αv	vind gust of	60 mph v	vas reporte	d by	the C	Coast C	Suard.			
Manatee County Long Boat Key	19	1600EST			0	0	2	1	Thunderstorm Win	d	
	Tre	es and power	er lines we	ere downed	i.					-	
Lake County 1 S Clermont	19	1630EST			0	0	3	0	Thunderstorm Win	ds	
	Thu poo	inderstorm I screened e	winds pick enclosure.	ted up a u	tility	shed a	and de	posited	it one block away o	n a swimmi	ing
Monroe County 6 NW Key West	19	1806EST							Waterspout		
	Αv	vaterspout v	vas reporte	ed.							
Volusia County Daytona Beach	20	1215EST			1	0	0	0	Lightning		
	A n	nan wading	in the oce	an 75 yard	ls off	shore	was k	illed by	y a lightning strike.	(M310)	
Hillsborough County Tampa Hillsborough County	20	1723EST			0	0	4	0	Thunderstorm Win	d	
Hillsborough County Tampa Broward County	20	1815EST			0	0	2	.0	Thunderstorm Win	đ	
Coral Springs	21	1415EST			1	1	0	0	Lightning		

<u> </u>	П		1	Γ	NO.	OF	ESTIM	IATED	JULY 1990
PLACE	DAO-E	TIME LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	PER	OF SONS	PACO PLEST IN	GE CROPS	CHARACTER OF STORM
FLORIDA Cont'o	d								
Volusia County Deland	21	1730EST			0	0	4	0	Lightning
Polk County Alturas		ightning-ini 1830EST	tiated fire	caused \$1	2,000 0	dama	age to	a hous 0	e. Thunderstorm Winds
	Thu	nderstorm	wind gusts	blew off	a hou	se roo	of caus	ing \$ 2	,500 damage.
Hillsborough County Thonotasassa	21	1850EST kel-size hai	l was reno	rted.	0	0	0	0	Hail (1.00)
Okaloosa County Ft. Walton Beach	22	1315EST	•		0	1	0	0	Lightning
	A m	nan was stri	uck by ligi	htning in t	he pa	rking	lot of	a golf	course.
Madison County Madison	22	1400EST			0	0	20	0	Thunderstorm Winds
	Tree	es were blo	wn down.	One falli	ng tre	e dan	naged a	a house	e roof.
Brevard County Palm Bay Melbourne 5 N Melbourne	22 22 22	1612EST 1615EST 1635EST			0 0	0 0 0	0 0 4	0 0 0	Hail (0.75) Hail (0.75) Thunderstorm Winds
	A th	understorn sing develo	n moved no pments to	orth dropp the north	ing la	rge h lbour	ail on ne. Se	Palm I everal	Bay and Melbourne, then damaging large pine trees were snapped.
Broward County Southern part Ft. Lauderdale		1630EST 1705EST			0	0	0	0	Thunderstorm Winds Thunderstorm Winds
	Tree	es and powe	er lines we	re blown	lown	in so	uthern	Browa	ard County and Ft. Lauderdale.
Pasco County St. Joe	23	1300EST							Funnel Cloud
	A fu	ınnel cloud	was photo	ographed ju	ıst be	fore i	t move	ed over	r city hall.
Hillsborough County Riverview	23	1315EST					:		Funnel Cloud
	The	public repo	orted a fun	nel cloud.					
Duval County Jacksonville		1545EST			0	1	0	0	Lightning
	A cc	onstruction	worker wa	e serionsly	v inin	red h	v a ligi	htning	strike

A construction worker was seriously injured by a lightning strike.

St. Johns County Ponte Vedra

23 1715EST

0 0 5 Lightning

A lightning-initiated fire caused \$50,000 damage to a house.

Monroe County 7 S Key West

24 1343EST

Waterspout

National Weather Service personnel reported a waterspout.

JULY 1990

		TIME			NO.	OF SONS	EST II	ATED AGE	
PLACE	D E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K LLEED	OHIOC C.E.	«-сантосла то	woo	CHARACTER OF STORM
FLORIDA Cont					<u> </u>				

	<u>L</u> .			<u> </u>	Ľ.	b	Ÿ		
FLORIDA Cont'	d								
Palm Beach County Loxabatchee	24	1515EST			0	0	5	0	Lightning
	Tw \$50	o attached 1 0,000 damag	nobile ho	mes were	destro	oyed l	oy a li	ghtnin	g-initiated fire causing an estimated
St. Johns County Northern Part	24	1600EST			0	0	0	0	Thunderstorm Winds
	Tre	es and power	er lines w	ere blown	dowr	1.			
Charlotte County Punta Gorda	24	1600EST			0	0	., 3	,0	Thunderstorm Winds
	A r	oof was rip	ped off a	mobile ho	me.				
Putnam County Palatka	24	1707EST			. 0	0	0	0	Thunderstorm Winds
	Tre	e limbs wer	e blown c	off.					•
Highlands County Avon Park Lake Placid	24	1740EST			0	0	0	0	Thunderstorm Winds
	Tre	es and pow	er lines w	ere blown	dowr	1.			• •
Monroe County 1 S Big Pine Key	24	1910EST							Waterspout
	The	e Coast Gua	rd reporte	d a waters	pout.				
Lee County Ft. Myers Cape Coral Captiva Island	24 24 24	1910EST 1918EST 1930EST			0 0	0 0 0	3 3 0	1 0 0	Thunderstorm Winds Thunderstorm Winds Thunderstorm Winds
	por	building und ch in Cape and.	ler constru Coral wa	action in F s damaged	t. M l and	yers o trees	ollapse and p	ed from	n thunderstorm winds. A screened lines were blown down on Captive
Pasco County		•							
3 S New Port Richey	25	1000EST	Short		0	0	0	0	Waterspout Tornado (F0)
4 NW Hudson	25	1000EST	Short		0	0	0	0	Waterspout Tornado (F0)
	Tw	o waterspou	its moved	onshore b	ut dic	l no d	amage		(1)
Dade County 10 SW Miami	25	1315EST	4		0	1	0	0	Lightning
	Αc	construction	worker su	iffered but	ns or	his c	hest w	hen st	ruck by lightning.
Broward County Deerfield Beach	25	1415EST			0	2	0	0	Lightning
	_	•			. •	. ••			

Two roofers were injured by a lightning strike.

JULY 1990

		TIME			NO. PER	SONS	ESTII DAM/	MATED AGE	
PLACE	DAOLE	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	מיירי-א			COCOA	CHARACTER OF Storm

FLORIDA Cont'o	i						•
Sarasota County Nokomis	25	1440EST	0	0	3	0	Hail (0.75) Thunderstorm Winds
Venice	25	1450EST	0	0	0	0	Hail (1.25)
·	At l	Nokomis trees were blown down nage. Golf ball-size hail was rep	ı, roc orted	of tiles lat Ve	were	damag	ged, and three cars suffered minor
Citrus County Floral City	25	1530EST	0	0	2	0	Thunderstorm Winds
	Tree	es were blown down and one fel	lona	a hous	e.		
Orange County Orlando	25	1700EST	0	0	5	0	Thunderstorm Wind (G60)
	ovei	ge trees were downed and severa rturned and a mobile home park ped at Orlando International Air	recei	ved da	ımage	to 3 to	Several sailboats in drydock were 5 units. Five small aircraft were 60 knots measured.
Osceola County 5 ENE Kissimee	25	1735EST	0	0	0	0	Thunderstorm Wind (G50)
	Win	nd gusts over 50 knots were reco	rded	at the	Dopp	ler wea	ther radar test site.
Highlands County Avon Park Sebring	25 25 25	1805EST 1815EST 1820EST	0 0 0	0 0 0	4 0 4	0 0 0	Thunderstorm Winds Hail (2.00) Thunderstorm Winds
·	dam	road tracks were lifted slightly laged at Avon Park. In Sebring v was reported.	. Pl vind	laygrou gusts c	und ec lamage	quipme ed a car	nt, fences, and a barn roof were r dealership and 1.5- to 2-inch-size
Nassau County Fernandina Beach	26	0800EST	0	0	4	0	Thunderstorm Winds
	A th	nunderstorm gust collapsed a por	tion	of a ro	of at a	a shopp	ping center.
Monroe County Grassy Key	26	1230EST					Waterspout
	The	Sheriff's office reported a water	spou	t.			
Charlotte County Port Charlotte	26	1400EST	0	0	3	0	Lightning
	A h	ouse caught on fire after a lightn	ing s	strike.			
Monroe County 2 SE Key West	28	0932EST					Waterspout
	A w	vaterspout was reported.					
Polk County Lake Wales	29	1400EST	0	0	4	0	Lightning
	Fou	r horses valued at \$6,000 were k	tilled	by a l	lightni	ng stril	ke.

	1	r		Τ	l NO	05	ECTI	MATER	JULY 1990
		TIME			PER	SONS		MATED AGE	
PLACE	P	LOCAL	LENGTH OF PATH	WIDTH OF PATH		Ä	com octor	COCOEN	CHARACTER
	É		(MILES)	(YARDS)	E	ΙŬ	Ę	Š	STÖRM
					ען	B	i K		
<u> </u>		<u> </u>		<u> </u>			<u> </u>	·	
GEORGIA		2						•	
Gilmer County 6 ESE Cartecay	01	1720EST			0	0	?	?	Thunderstorm Wind
	A f	ew trees we	re blown	down arou	nd th	e Big	Creek	comm	unity.
Hancock County						·			•
Countywide Washington County	01	2010EST			0	0	?	?	Thunderstorm Wind
Countywide	01	2010EST			0	0	?	?	Thunderstorm Wind
	Şça	ttered trees	were blow	n down by	thun	dersto	rm wi	nds at	several locations in Washington and
	Hai	ncock count es and the w	ies. A fev inds.	v power ou	ıtage	s resu	ited w	hen util	lity lines were torn down by falling
Morgan County									
Buckhead	01 01	2010EST 2010EST			0	0	?	?	Thunderstorm Wind Hail (1.75)
			n roof wa	s blown of	_	•	_	•	thunderstorm moved over Morgan
	Coi	unty. Scatte	ered trees	and power	lines	were	blown	down	
Colquitt County	m	1450EST			Δ	Λ	9	?	Thursdaystay Wind
1 N Norman Park Ellenton	02				0	0	?	-	Thunderstorm Wind
Berlin	02	1515EST			0	0	?	?	Thunderstorm Wind
	Sev Par	eral large tr k. Near El	ee limbs w lenton and	ere blown Berlin, sc	down attere	by wed trea	inds or es were	ver nort e down	theast Colquitt County near Norman ed.
Mitchell County				•					•
3 W Hopeful	02	1525EST			0	, 0	?	?	Thunderstorm Wind
	Nu	merous tree	s were blo	wn down o	on Ge	orgia	High	way 31	1.
Baker County	M	1 <i>5</i> 0 <i>5</i> E0T			^	^		0	77h
15 NW Newton 2 SW Newton	02	1525EST 1630EST			0	0	?	?	Thunderstorm Wind Thunderstorm Wind
	Nu	merous trees	were blov	vn down so	outhw	est of	Newto	on alon	g Georgia Highway 91. Trees were
	also	down alon	g Georgia	Highway	216.				
Toombs County Lyons	02	2020EST			0	0	0	?	Hail (1.75)
Houston County		2020201					•	•	11-12 (1000)
Elko	02 02	2020EST 2020EST			0	0	0 ?	0 ?	Hail (1.50) Thunderstorm Wind
Perry		_	1.1		_	-	•	•	
	Sca	ttered trees	were blow	n down ar	ouna	Perry	/.		
Dooly County Pinchurst	02	2020EST			Q	0	?	?	Thunderstorm Wind
Unadilla Bryomville	02 02	2035EST 2050EST			0	0	?	?	Thunderstorm Wind Thunderstorm Wind
•			were unr	ooted by the	under	storm	winds		orthern and western Dooly County.
	Sca	ttered nowe	r outagês	resulted w	hen f	alling	trees	and wi	nds tore down the utility lines and ing at several locations.
Hagon County	ગાત	hhor severa	poios. 1	141101011110		10 501	LUR UY	ngnan	mg m sovoiai iocativiis,
Upson County 2 N Thomaston	07	1615EST			0	0	?	?	Thunderstorm Wind

Numerous trees and power lines were blown down by thunderstorm winds. One mobile home was completely demolished and another was overturned by the winds.

	TIME			NO. PER	OF SONS	ESTI!	MATED AGE	
PLACE E	LOCAL	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	Ki-BUO	OHING LE	P-2000-Y	COCOPA	CHARACTER OF STORM

				<u> </u>		ð	Y_	:	
GEORGIA Cont	'd								
Troup County LaGrange Countywide	07	1755EST			0	0	?	?	Thunderstorm Wind
	Nu: The	merous trees e heaviest tr	s were blov ee damage	wn down by coccurred	y thu over	ndersto the ea	orm wi stern j	inds a portio	round LaGrange and over the county n of Troup County.
Floyd County Cave Springs	07	1850EST			0	0	?	?	Thunderstorm Wind
	A i	few tree lin ages.	nbs were	blown onto	o po	wer lii	nes by	thun	derstorm winds, resulting in powe
Houston County Bonaire	08	1430EST			0	0	?	?	Thunderstorm Wind
	A f	few trees we	ere blown	down by t	hund	erstorn	n wind	ds.	•
Twiggs County 10 SW Jefferson- ville	08	1430EST			0	0	?	?	Thunderstorm Wind
	Nu: Hig wei	merous tree ghway 96, a re torn dow	s were blo and Georgi n by the fa	own down ia Highway alling trees	arou y 358 and	ind Jei B. Sca winds	ffersor ttered	ville powe	near Georgia Highway 87, Georgia or outages resulted when utility line
Bleckley County 7 N Cochran	08	1430EST			0	0	?	?	Thunderstorm Wind
	Sca Hig	ittered trees ghways 87 a	and pow and 112.	er lines v	vere	blown	dow	n by	thunderstorm winds along Georgia
Barrow County Winder	08	1720EST		,	0	0	?	?	Thunderstorm Wind
	Thu	understorm	winds cau	sed scatter	ed po	wer o	utages	•	
Troup County Eastern Troup County	08	1745EST			0	0	?	?	Thunderstorm Wind
	Sca	ittered trees	were blov	vn down b	y thu	nderst	orm w	inds.	
Fulton County 5 SW Sandy Springs	08	1754EST			0	6	0	0	Lightning
	Lig of (htning structhe nine raf	ck a raft or ters on boa	n the Chatt ard. The i	ahoo ininji	chee Rured p	liver in ersons	n extre were	eme northern Atlanta and injured six thrown from the raft upon impact.
De Kalb County Atlanta	08	1756EST			1	0	0	0	Lightning
	Lig	htning struc	ck and kill	ed a boy a	s he	walke	d besid	de a p	ool. (M140)
Fulton County Atlanta 6 SE Smyrna	08 08 08				0	0 0 0	?	0 0 0	Thunderstorm Wind Thunderstorm Wind Funnel Cloud

Scattered trees were blown down by thunderstorm winds around Atlanta. A few power outages resulted.

	·	— т		· · · · · · · · · · · · · · · · · · ·		- T		1	JULY 1990
		TIME			PER	SONS	ESTIN DAMA	MATED	
PLACE		OCAL ANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K L BEO			CECOEN	CHARACTER OF STORM
GEORGIA Cont	ď								
Dougherty County Albany	08 193	30EST			0	0	?	0	Thunderstorm Wind
·	Several scattered	large tro d power	ee limbs v outages.	were blowr	ı dov	n ont	o pow	er line	s in southwest Albany, resulting in
Calhoun County Morgan	08 200	00EST			0	0	?	?	Thunderstorm Wind
	Numero outages		e tree lim	bs were bl	own	down	onto	power	lines, resulting in scattered power
Carroll County Villa Rica	08 200	00EST			0	0	?	0	Lightning
	Two bo in a larg	olts of lig ge fire.	ghtning st	ruck a vent	fan :	and th	e roof	of a te	xtile manufacturing plant, resulting
Terrell County Countywide	08 200	00EST			0	0	?	?	Thunderstorm Wind
2 N Dawson Dawson	08 203	30EST			0	0	?	?	Thunderstorm Wind
	Scattere downed short di the city that pou awnings	ed trees of around stance. hall sust ured into s, or roo	were blow Dawson. Numerous ained extent the build ofs; particu	on down as Just north s power ou nsive wind ling. Seven larly the n	thurn of I stages dammeral b	dersto Dawso result age, al buildin roofs.	orms s on, sev ted over llowings eith One	wept a eral ut er the e g addit her los automo	cross the county. Many trees were ality poles were blown down over a entire area. At Dawson, the roof of conal damage from the heavy rainfall tor had damage to their windows, obile was damaged by a falling tree.
Randolph County Cuthbert	08 203	30EST			0	0	?	?	Thunderstorm Wind
	Many p power of the road	putages o	nes and or over Cuth	ne utility p bert. Man	ole w y trea	vere ble limb	lown o	down b a few p	y thunderstorm winds, resulting in sower lies were blown down across
Laurens County East Dublin 1 S Dublin East Dublin	09 170	59EST 05EST 22EST			0 0 0	0 0 0	?	0 0 0	Thunderstorm Wind Thunderstorm Wind Thunderstorm Wind
	Scattere	ed trees v	were blow	n down ar	ound	Dubli	in by 1	thunder	rstorm winds.
Gwinnett County Snellville	09 173	30EST			0	1	0	0	Heat
	An 80-3	year-old	woman w	as treated	for d	ehydra	ation a	ınd hea	t-related medical problems.
Buford	09 190	00EST			0	0	?	0	Lightning
		ng strucl wer outa		under con	struci	ion ar	nd des	troyed	it. Lightning strikes also caused a
Ben Hill County Countywide	09 190	00EST			0	0	?	?	Thunderstorm Wind

Numerous trees were blown down by thunderstorm winds around Ben Hill County. Scattered power outages resulted when trees and strong winds tore down utility lines.

		TIME			NO. PER	OF SONS	EST IN	AATED AGE	
PLACE	D	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K L	CHESCLE	4-came0280	CECOEN	CHARACTER STORM

GEORGIA Cont	u							
Irwin County Countywide	09	1900EST	Ċ)	0	?	?	Thunderstorm Wind
	Nu out	merous trees were blages resulted when t	own down by the crees and winds	hun to	derste re do	orm w wn uti	inds ac lity lir	cross Irwin County. Scattered power nes.
Ben Hill County Fitzgerald	09	1935EST)	0	?	?	Thunderstorm Wind
	Sca who	ittered trees and power a large pine fell u	er lines were bi	low	n dov	vn by	thunde	erstorm winds. A boat was damaged
Catoosa County Countywide	10	1700EST	()	0	?	?	Thunderstorm Wind
	Tre	es and power lines v	were blown do	wn	at sev	veral l	ocation	ns.
Houston County Warner Robins Warner Robins	10 10	1715EST 1735EST))	0	?	0	Thunderstorm Wind Thunderstorm Wind
	Thu sign	understorm winds da ns were damaged by	maged a house the winds, inc	e at	1715 ing to	EST. wo pla	Duri te glas	ng the storm, several buildings and swindows in a business.
Bartow County Adairsville	10	1715EST	. ()	0	?	?	Thunderstorm Wind
	Sca	ttered trees were blo	own down by t	hun	derst	orm w	inds, 1	resulting in a few power outages.
Fannin County Mineral Bluff	10	1740EST	()	0	?	?	Thunderstorm Wind
	Sca	ttered trees were blo	own down onto	mo	bile	homes	and a	cross the roads.
Polk County Rockmart	10	1840EST	. ()	0	?	0	Thunderstorm Wind Small Hail
	line	nds took the roof of es. Scattered trees ttered.	f a building in were blown do	do wn	wnto . Ti	wn Ro he pla	ockmai te glas	rt and dropped the roof onto power ss window of a car dealership was
Baldwin County Milledgeville	10	1910EST	()	0	?	?	Thunderstorm Wind
	A c isol	ouple of large trees ated outages.	were blown do	wn	by th	under	storm	winds onto power lines, resulting in
Crawford County Roberta Eastern Crawford	10	1945EST	().	0	. ?	. 0	Thunderstorm Wind
County	10	1945EST)	0	?	?	Thunderstorm Wind
	An blo	empty mobile home wn down onto powe	was overturne r lines over the	d by	y win stern	ds nea half c	r U.S. of the o	Highway 80. Scattered trees were county.
Bibb County 2 N Macon	10	2110EST	()	0	?	0	Thunderstorm Wind
	Sca and	ttered trees were blo caused structural da	wn down by thimage.	unc	dersto	orm wi	inds at	Macon. One tree fell onto a house

		· · · · · · · · · · · · · · · · · · ·	r	I NO	OE	ESTIN	ATED T	· · · · · · · · · · · · · · · · · · ·	JULY 1990
	TIME	LENCTU	UINTU	PER	OF SONS	ESTIM DAMA			
PLACE	D LOCAL T STANDARD	LENGTH OF PATH	WIDTH OF PATH	}	ģ	Ř	N-0000	CHARACTER	
	E	(MILES)	(YARDS)	E	Omoci.	com to Control	S	SŤÓRM	
					D	Ť			
GEORGIA Cont'	d ·								
Jones County 3 S Gray	10 2115EST	•		0	0	?	?	Thunderstorm Win	đ
•	Scattered trees	were blow	vn down b	y win	ds on	to pow	er line	s, resulting in power	outages.
Houston County	44 000077		•			•		***	
Bonaire	11 0030EST		ъ .	0	0	?	0	Lightning	
	Lightning stru fire damage to	the attic a	i Bonaire a irea.	nd jui	mped	to a ne	arby h	ouse. The house suff	ered extensive
Whitfield County	11 1000F0T	i		^	^	•	0	77 1 37	
Countywide Tunnel Hill	11 1209EST 11 1245EST			0	0	?	?	Thunderstorm Winderstorm Winderstorm Winderstorm	
	Power lines w One house sus A few tree lin	ere blown stained dam abs were bl	down by thage when lown down	nunder a tree a at Tu	rstorn fell u unnel	n wind: ipon it. Hill.	s at sev A po	veral locations in Whi ortion of a barn roof w	tfield County. vas blown off.
Troup County Whitfield				•	_	•	•		•
Whitheld	11 1209EST		. 11	0	0	?	?	Thunderstorm Win	1
Docatus County	Scattered pow	er lines we	re blown c	iown	by th	unaersi	orm w	inds.	
Decatur County Bainbridge	11 1445EST	,		0	0	?	0	Thunderstorm Wing Small Hail	đ ·
	Several aircrat Power outages	ft were dam s resulted v	aged by str when utility	rong t	hunde were	erstorm torn o	winds lown b	in an industrial park by the winds.	at Bainbridge.
Floyd County 2 NE Rome	11 1800EST	ı		0	0	?	0	Thunderstorm Wine	d .
	A few trees we and an automo the winds and	obile were	damaged.	anders Powe	storm er out	winds ages re	near R sulted	ome. At separate loca when utility lines we	tions, a house re downed by
Warren County 2 E Warrenton	11 1800EST	ı		0	٥	2	7	Thunderstorm Wine	1 (C56)
2 E Warrenton	11 1800EST			0	0	? 0	? 0	Hail (1.75)	a (050)
	Around U.S. I gusts were est wrapped it arc	Highway 8 timated to ound a telep	0, large tre be near 70 phone pole	es fel mph	l onto . A	powe storage	r lines, build	resulting in power o ing was destroyed wl	utages. Wind hen the winds
Bryan County Northeastern									•
Bryan County	11 1630EST			0	0	?	?	Thunderstorm Wind	đ
	located along	Interstate 1	The win	nds ca	rried	the roo	of airbo	ent of Transportation orne before setting it d long the highway.	weigh station lown about 50
Laurens County 5 S Dublin	12 1815EST			0	0	?	?	Thunderstorm Win	đ
•	Scattered trees	were blov	vn down o	nto po	wer 1	lines, r	esultin	g in power outages.	
Oconee County Watkinsville	17 1625EST	ı		0	0	5	A ·	Thunderstorm Win	A
w alkinsville			wed sever	•	•		4 and d	lowned several trees	
	Watkinsville.	Over 2,00	0 turkeys	were	killed	. Dan	age co	osts were estimated at	\$180,000.

JULY 1990

		-							·	JULY 1990
		TIME			NO. PER	OF SONS	EST II	MATED AGE		JULT 1990
PLACE	DAG-E	LOCAL STANDARD	LENGTH OF PATH (MILES)	PATH (YARDS)	K-L-EUD	OHING LES-	4- com 000 o	CEOPN	CHARACTER OF STORM	
GEORGIA Cont'	d	š								
Floyd County Rome	21	1700EST			0	0	?	0	Thunderstorm Win	ıd
	21	1800EST			0	0	4	0	Lightning	
	pov	understorm ver outages ut \$45,000	for nearly	1,500 resid	cnock lents.	ed sev Ligh	eral to tning	rees ont struck t	to power lines, resulti the upper story of a ho	ng in scattered me and caused
Gwinnett County Lawrenceville	22	1230EST			0	0	?	0	Lightning	
Southern Gwinnett County	22	1300EST			0	0	?	0	Lightning	
	Lav	htning stru vrenceville, unty, lightni	lightning	struck a tro	ee and	i start	ed a g	Lawrer as leak	nceville. At another, but no fire. In sout	er location in hern Gwinnett
McDuffie County Boneville	22	1415EST			0	0	?	0	Lightning	
	Lig	htning set a	cabinet sh	nop in Bon	eville	afire	; the s	shop w	as destroyed.	
Columbia County Martinez Richmond County	22	1430EST			0	0	?	0	Lightning	·
Blythe Hephzibah	22	1500EST			0	0	?	0	Lightning	
	Thu abo	inderstorms ut 400 hom	moved oves. Lighti	ver Columining cut a	bia ar teleph	nd Ric	chmon able i	nd cour n half	nties and caused pow and struck many pow	er outages for er lines.
Troup County LaGrange	22	1730EST			0	0	?	0	Lightning	
	elec the	trical currer electrical ar	nts through poliances a	n the area. nd then on	The to the	current ree of	nt mov	ed thromes al	ng bolt struck a pine ough the roof at the fill long the block. Along three of the homes, at a washing machine.	rst home, into
Catoosa County Fort Oglethorpe	22	1745EST			0	0	?	?	Thunderstorm Win	d .
		ver lines we ethorpe. Se						ls over	western Catoosa Con	unty near Fort
Walker County Rossville	22	1745EST			0	0	?	?	Thunderstorm Win	d
		ver lines w sville.	ere blown	down by	thun	dersto	orm w	vinds o	over northern Walker	County near
Chatham County 25 SE Savannah	22	1751EST			1	1	0	0	Lightning	

Two men were struck by lightning on the northern end of the beach at Tybee Island near the Savannah River entrance. One man died; the other was seriously injured. (M220)

JULY 1990

		TIME			NO.	OF	EST II	MATED AGE		
PLACE	D A E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K-1-m0	I N TORMO	P.R.OO.LINE	CECOEN	CHARACTER OF STORM	
GEORGIA Cont	'd						•			
Murray County Chatsworth	22	1800EST			0	0	?	0	Lightning	
	Lig	htning struc	ck a duple	x, displace	d 10)- to 1	2-feet	of cor	crete, including th	ne doorsteps

ps, and punctured a wading pool in several places. The bolt traveled through the house, ripped the carpet, and knocked the baseboards off the wall. Another lightning bolt destroyed a nearby tree. Lumpkin County ? 22 1952EST Thunderstorm Wind 1 N Dahlonega Thunderstorm winds downed several trees. White County Cleveland 2007EST 0 Hail (0.88) Habersham County 22 2030EST ? Lightning 4 N Batesville Lightning damaged a chicken house in northern Habersham County. Stephens County 4 NNE Toccoa 22 2045EST Thunderstorm Wind Winds downed several trees. Power outages developed after the trees tore down power lines over northern Stephens County. Butts County Griffin 23 1500EST Thunderstorm Wind A few trees and limbs were blown down by thunderstorm winds near Griffin. Scattered power outages developed over Butts County. Henry County 23 1530EST Thunderstorm Wind Hampton Thunderstorm winds blew down utility lines, resulting in scattered power outages. **Cobb County** Smyrna 1550EST 0 : 23 0 Marietta Thunderstorm Wind Small Hail Numerous power outages developed at Smyrna and Marietta after thunderstorm winds downed power lines and trees.

23 1615EST Thunderstorm Wind Thunderstorm winds blew down utility lines, resulting in scattered power outages. Lightning Hail (1.75) 1615EST ŏ

Fayette County

Countywide

De Kalb County North Atlanta Druid Hills

Countywide Stone Mountain

> Lightning struck a home in northern Atlanta and caused significant fire damage. Trees were blown down at several locations and, along with the winds, tore down power lines and caused scattered power outages over De Kalb County. A few homes had structural damages from the falling trees.

Thunderstórm Wind (G63)

Thunderstorm Wind

	1	<u> </u>			l NO	05	ECTIM	IATED		JULY 199
		TIME			PER	SONS	ESTIM DAMA	GE	·	
PLACE	D-E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	Compression	-ATTOMINE THE	~-camooa	Cecoen	CHARACTER OF STORM	
GEORGIA Cont'	ď								· · · · · · · · · · · · · · · · · · ·	
Rockdale County Conyers	23	1710EST		•	0	0	?	0	Thunderstorm Wind Small Hail	
	Tre	es blown do	own by thu	ınderstorm	winc	ls fell	onto p	ower 1	lines, resulting in scatte	red outage
Meriwether County Gay	23	1710EST			0	0	?	?	Thunderstorm Wind	
	A f	ew trees an	d power li	nes were b	olown	dow	n by th	e wind	ls.	!
Furner County 5 N Ashburn Ashburn	23	2025EST			0	0	?	?	Thunderstorm Wind	•
	Win	nds damage	d several h	ouses and	a loc	al pla	nt nurs	ery, w	hile numerous trees we	re broken
levie County	upr	ootea. Pov	ver outage	s aevelope	a wn	en uti	lity lin	es wer	e torn down during the	storm.
Irwin County 6 NW Irwinville 3 W Irwinville	23	2048EST			0	0	?	?	Thunderstorm Wind	•
•	Ma Pov	ny trees we	re downed	l over wes when line	tern	Irwin	Count n down	y, espo	ecially near Georgia H e trees and winds.	ighway 10
Chatham County			-						·	
Savannah	25 26	2230EST- 0230EST			0	0	?	0	Flash Flooding	
	low the	-lying areas	s. Rainfal d downtov	l amounts vn sections	over of Sa	the ar	ea rangah, floo	ged fro ding o	nm County caused flash om 2 inches to around occurred over numerous ew houses.	7 inches.
Mitchell County 3 S Pelham	31	1500EST			0	0	?	?	Thunderstorm Wind Small Hail	
	A s the	tore suffere garage roof	d damages f over a ne	when the arby field.	winds The	s blew e wind	/ away Is shift	most o	of the front porch roof a roof of the owner's ne	and scattere arby home
DAHO			•							
Canyon County Ada County	01	1725MST			0	0	4	0	Thunderstorm Wind	
	Roc	ofs and pow	er lines w	ere damag	ed at	Melb	a, Kun	a, and	Boise.	
Washington County 5 N Weiser	09	2030MST		20	0	0	4	0	Tornado (F1)	
	Uti	lity building	gs explode	d.						
Caribou County Soda Springs	23	1336MST			0	0	0	0	Thunderstorm Wind	(G50)
Bear Lake County Montpelier	23	1356MST			0	0	5	0	Thunderstorm Wind	(G65)

Cottonwood trees were uprooted and roofs damaged.

	Ţ	T		1	NO.	OF SONS	ESTI	MATED AGE	JULY 1990
	D	LOCAL	LENGTH	HTQIW	K	SONS			
PLACE	Į	STANDARD	PĂTH	PATH			ğ	OROD W	CHARACTER OF STORM
	-		(MILES)	(YARDS)	E	Ŭ	-com o O se o	S	STORM
		<u> </u>			<u> </u>		<u> </u>		
IDAHO Cont'd									
Caribou County Soda Springs	23	1700MST			0	0	0	0	Thunderstorm Wind (G50)
IDZ004-006-010- 011 Central and Southern Idaho	23 24	1700MST 0500MST			0	0	4	5	Lightning
Southern Idano						-	- C C		
	con	ousands of I ditions. The s controlled	ie Little Pa	ark fire on	ed ac the S	shosho	or fores	st fires M Dist	under moderate to extreme drought trict blackened 3,000 acres before it
Bannock County Chubbock	24	1200MST			0	0	0	0	Hail (0.75)
Ada County Melba	30	1800MST	0.1	20	0	0	3	0	Tomado (F0)
Elmore County	30	1810MST			0	0	. 0	0	Thunderstorm Wind
	Ext	treme turbul 10,000 feet.	lence 10 n	niles distan	t fro	m a th	nunders	storm t	urned a PA34 aircraft upside down
Shoshone County Prichard	30	1830PST			0	0	4	0	Thunderstorm Wind (G50)
IDZ006-011-010 Central and	30	1900MST	-					_	
Southern Idaho	31	0300MST			0	0	3	5	Lightning
ILLINOIS									
ILZ001-004-005	01	1200CST			0	0	?	6	Flood
	Flo Riv He	oding occur ver at Freepo nry and nor	rred through ort, flood of thwest Bur	gh July 5th crest occurreau counti	beca red m es be	use of iidday cause	frain to July 4 of star	hat fell th. He nding v	in late June. Along the Pecatonica eavy crop damage occurred in north water on croplands for several days.
Perry County Du Quoin	05	1700CST			0	0	5	?	Thunderstorm Wind
	The thre	understorm oughout Per	winds dan ry County	naged trees . Du Quo	s and in St	powe ate Fa	er lines urgrou	s from nds inc	Du Quoin to Dowell and scattered curred extensive tree losses.
Peoria County 8 NNW Peoria	09	2025CST		•	0	0	?	?	Hail (2.75)
Winnebago County Loves Park	18	1315CST			0	0	4	0	Thunderstorm Wind
	The	ere was dan curred throu	nage to tr ghout the	ees and po county.	wer	lines	at Lov	es Par	k. Other scattered power outages
Boon County Garden Prairie	18	1340CST			0	0	3	0	Thunderstorm Wind
		ere was dam	age to tre	es and pow	ver lin				•
McHenry County			•	1					
34 ENE RFD Woodstock	18 18	1410CST 1410CST			0	0	? 4	?	Hail (1.75) Thunderstorm Wind

There was damage to trees and power lines from Marengo to Woodstock.

		т—	Ι	···	T	TNO	OF	ECTI	MATER		JULY 1990
			TIME			PER	SONS	DAM	MATED AGE		
		P	LOCAL	LENGTH OF	WIDTH OF PATH	K	Ī	R	Ç	CHARACTER	
	PLACE	Ę	STANDARD	PATH		 E	Ü	-compo	COCO W	OF STORM	
!				(MILES)	(YARDS)	ŧ	Ď D	E	S		
							ט	¥			
]	ILLINOIS Cont'o	1							_		
]	McHenry County McHenry	19	1400CST			0	0	4	0	Thunderstorm \	Wind
		Tre	es and pow	er lines we	ere downe	d by	thund	erstorr	n wind	s.	
1	Kane County		-	•		•		•			
•	Dundee	19	1415CST			0	0	. 4	0	Thunderstorm \	Wind
		Tre	es and pow	er lines we	ere downe	d by	thund	erstori	n wind	s.	
1	Door Coverty					-,				•	
,	Boon County Belvidere	19	1500CST			0	0	4	?	Flash Flood	
			Estimated								
		Fla line	sh flooding es and drains	occurred a age system	fter heavy s were ove	thun rload	dersto led. S	rm rai ome lo	ns fell ocation	on already full wa s had the worst flo	terways. Sanitary oding in memory.
]	La Salle County										
	Streator	19	1530CST			0	0	4	0	Thunderstorm \	Wind
		Tre	es, power li	ines, and l	arge light	poles	at a	ball fi	eld wer	re downed.	
(Cook County	19	1730CST Estimated			0	0	- 5	0	Thunderstorm \	Wind
		Son	ithern Cook	County ha	d scattered	l dam	age to	trees	and stra	actures along with	widespread power
		out	ages caused	by lightni	ng.	dam	age to	11003	and sur	ictures along with	widespread power
	Mount Greenwood	19	1745CST			0	1	3	0	Lightning	
		A p	oarked car w	vas struck headache.	by lightnii Witnesse	ng; th s saw	ne only	y occu	pant w	as a woman and so ound the car. The	he was left dazed injured occupant
		saw	orange ball	ls dancing	all over th	e car	and th	hought	the lig	htning first hit a trees in southern Coo	ree beside the car.
		Lig	nining cause	ea omer a	amage to s	struct	ures a	na pov	wer iin	es in southern Coo	ok County.
1	Winnebago County Rockford	19	1800CST Estimated			0	0	4	?	Flash Flood	
	-	Flo	oding occur	red to stre	ets, basem	ents,	and s	ewer l	ines.	Rainfall of 2.64 in	ches fell in about
		3.3	hours from	1500 to 1	830 CS1.					•	
1	Ou Page, Cook Counties	20	0100CST Estimated			0	0	5	0	Flash Flood	
		ΥΥ1.			ofton alar		ina 4L	,,,,,,d.,		dramad mars 41-	n 1 inches of sein
		on 1	the evening	of the 19th	h. Heavy	flood	ing the	f stree	ts and	dropped more that basements occurre	d, especially over
		con in h	soutnern na tributed to t Naperville.	he death o	f a 15-year	r-old	boy,	who d	rowned	basements occurre ge River later in the while canoeing w	vith another youth
5	St. Clair County		•								
•	Belleville	20	1500CST Estimated			0	0	4	0	Thunderstorm V	Wind
		Hea	ivy damage	occurred t	o church c	const	ruction	n and	there w	ere also some pov	ver outages.
I	Alexander County 25 W PAH	20	1515CST	·		0	0	?	?	Hail (l.75)	
					•						

Illinois State Police reported golf ball-size hail in Cache.

JULY 1990

		TIME			NO. PER	OF SONS	ESTIN DAMA	ATED GE] 3011 1990
PLACE	ĐĐE	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	טיין - יא	Om20Cc.25		CORODO	CHARACTER OF Storm	
ILLINOIS Cont'd	1 .						,			
Crawford County Robinson 5 E Robinson	20 20	1757CST 1807CST	·		0	0	?	?	Hail (2.75) Hail (2.75)	
Sangamon County	21	1800CST			0	0	4	?	Flash Flood	
	He: par	avy thunders t of Sangan	storm rains non County	caused wid	despr	ead flo	ooding	of cou	nty highways, most	y in the northern
Jackson County 1 NW Gorham	21	1815CST			0	0	0	3	Thunderstorm W	'ind
	Tre	es were dov	wned by th	understori	n wir	ıds.				
1 W Carbondale	21	1840CST	-		0	0	?	?	Hail (0.75)	
Williamson County Cambria	21	1917CST			0	0	3	?	Thunderstorm W	'ind __
	ΑŢ	orch was to	orn off a h	ouse.						
1 S Herrin	21	1925CST			0	0	4	?	Thunderstorm W	ind (G53)
	Tre mp		er lines w	ere downe	d 1 r	nile so	outh of	f Herri	in, and winds were	estimated to 61
Franklin County West Frankfort	21	2200CST			0	0	4	?	Flash Flood	
	He	avy thunder	storm rain	s caused u	rban a	and lo	calized	flood	ing from Benton to	West Frankfort.
ILZ007 Peoria	31	2400CST			0	0	0	0	Record Rain	
	Thi Jul	s was the w y rainfall is	ettest July 3.99 inch	in 134 ye es.	ars of	f reco	rds, wi	th a to	otal rainfall of 9.18	inches. Normal
INDIANA										
Jackson County Brownstown	05	0828EST			0	0	5	0	Lightning	
	Lig	htning caus	ed \$70,00	O damage t	to a h	ome.				
Daviess County Washington	05	1711EST			0	0	3	?	Thunderstorm W	inds
	Th	understorm	winds upro	ooted trees	and	overtı	ırned a	ın auto	omobile.	
Dubois County Jasper St. Anthony	05 05 05	1733EST 1745EST 1800EST-			0	0	4	?	Thunderstorm W Thunderstorm W	
		2015EST			0	0	?	?	Flash Flooding	
	Thi	inderstorm	winds dov	vned trees	and	nowe	r lines	and 1	ifted a roof off a l	nouse in Jasper.

Thunderstorm winds downed trees and power lines and lifted a roof off a house in Jasper. Thunderstorm winds, or possibly a tornado, uprooted several trees at St. Anthony. Over 2.50 inches of rain fell over Dubois County flooding area roads. Highway 231 and almost all secondary roads were closed due to flooding.

	TII	IE		NO. PER	SONS	EST II	AATED AGE		•
PLACE	D LOCA	l OF	WIDTH OF PATH (YARDS)	R-1-IIIO		0.000m00->-	CECOLO	CHARACTER OF STORM	
INDIANA Cont	'd								7
Knox County Westphalia	05 1741 0245 05 1745	EST	·	0	0	?	?	Flash Flooding Lightning	
	Flooding and Bickn also close	ell was closed	es of rain c with over 2	losed feet	sever of wa	al cour ter cov	nty roa ering	ds. Highway 67 betwe parts of the road. High	en Vincenne way 241 wa
	along with approachi	th two others	had been the water b	swin out be	nming	y in a	pit v	eing struck by lightning when they noticed a ach the safety of a car	thunderstorn
Jackson County Seymour	05 2000	EST		0	0	?	?	Thunderstorm Wind	ls
Scott County _ Hardy Lake	05 2008	EST		0	0	?	?	Thunderstorm Wind	ls
ennings County Commiskey	05 2015	EST		0	0	?	?	Thunderstorm Wind	ls
	winds on thundersto	the northeast orm winds from	tern side o n 5 miles n	of Sey orthw	moui est o	r. Se f Hard	veral ly Lak	were blown down by large trees were blove through Hardy Lake, tey to Commiskey.	vn down b
Wells County Bluffton	09 1143	EST		0	0	0	0	Hail (1.00)	
Grant County Swayzee Marion	09 1535	EST		0	0	, 3	0	Thunderstorm Wind	ls ·
	Trees and	power lines w	ere blown	down	at Sv	vayzee	and o	n the northern side of	Marion.
l'ipton County Goldsmith	09 1534	EST		0	0	?	?	Thunderstorm Wind	ls
Miami County North Grove	09 1542	EST		0	0	?	?	Thunderstorm Wind	ls
	Trees wer	e blown down	by thunder	storm	winc	is.			
Montgomery Count Darlington	y 09 1620	EST		0	0	?	?	Thunderstorm Wind	ls
	Windows Montgom	were blown of ery County. Ro	out of a hoof damage	ouse from	by th stron	nunder g thunc	storm lerstor	winds in the northea m winds was reported i	stern part on Darlingtor
Boone County Thorntown	09 1631	EST		0	0	?	?	Thunderstorm Wind	s
	Trees wer	e blown down.	•						
Delaware County		<u>.</u>							

Henry County Dunreith New Castle

Muncie

09 1652EST

09 1638EST

? Thunderstorm Winds 0 ?

Thunderstorm Winds

0

Eight-inch-diameter trees were blown down on the south side of Muncie.

	Г	-	1	Τ	NO	OF.	FSTIN	IATED		JULY 1990
		TIME			PER	SONS	ESTIM DAMA			!
PLACE	DAO-E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	Comp	CHIBOCLES		Cocco	CHARACTER OF STORM	,
INDIANA Cont'o	1									
Wayne County 5 N Richmond Randolph County	09	1701EST			0	0	?	?.	Thunderstorm W	inds
Lynn	09	1710EST			0	0	?	?	Thunderstorm W	inds
	9.5 Ric Ric	miles north hmond mea hmond. Ti	h and 1.5 sured a wi rees, light	miles east ind gust to poles, and	of N 65 n pow	lew C iph. er lind	Castle. Power es wer	Minu lines v e blow	plown down by thur tes later a spotter 5 were downed 5 to 10 m down by thunder ng power line set fi	miles north of miles north of estorm winds in
Boone County Thorntown Dover Thorntown	09 09 09	1725EST 1808EST 1826EST-			0	0	?	?	Thunderstorm Wi Hail (1.75)	inds
Lebanon	UĐ	1900EST			0	0	?	?	Flash Flooding	
•	mil- qua 75.	es west of D rter inches	over and a contract of rain fellows to the contract of the con	nickel-size lat Lebanc deep, was	hail v on and flow	vas re 1 4 to ing o	ported 5 inch	2.5 mi es fell	Golf ball-size hail iles north of Dover. south of Thorntow County Line Road	Two and three- n on State Road
Marion County Northern side Indianapolis	09	1955EST			0	0	?	?	Thunderstorm Wi	inds
	A to	ree fell on a wn down ne	house car ar Michig	using struc an Road.	tural	dama	ge in n	orthen	n Marion County.	Trees were also
Fountain County Hillsboro	09	2020EST			0	0	?	?	Hail (1.00)	
Montgomery County Crawfordsville	09	2030EST			0	0	?	?	Thunderstorm Wi	
		es were blow in Crawfor		y thunders	torm	winds	2 mile	s north	and 4 miles west of	f Crawfordsville
Warren County	09	2130EST			0	0	?	?	Thunderstorm Wi	inds
	Wir	nd gusts est	imated at '	70 mph ble	w tre	æ lim	bs dow	'n.		
Fountain, Montgomery Counties	09	2245EST- 2310EST			0	0	0	0	Flash Flooding	
	near	ivy rain cau r Crawfords at Veeders	ville was o	ng water or closed due	Inte to hi	rstate gh wa	74 in s ter. St	souther anding	rn Fountain County, y water was reported	State Road 47 at U.S. 41 and
Daviess County Elnora	11	2255EST			0	2	0	0	Lightning	
	An Fair		carnival v	vorker and	a fair	goer	were i	njured	by lightning at the	Daviess County
St. Joseph County US 31 & Auten Rd 1 NE Roseland 2 NE Mishawaka	16 16 16	1853EST 1855EST 1910EST			0	0	?	?	Hail (1.50) Funnel Cloud Hail (1.00)	

A funnel cloud dipped about halfway to the ground and then lifted.

JULY 1990

`		TIME	·		NO PER:	OF SONS	ESTIM DAMA	ATED GE	JULY 1990
PLACE	E D	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K-1-m0			Cacoen	CHARACTER OF STORM
INDIANA Cont'e	d								
LaPorte County 3 E LaPorte	16	1903EST			0	0	?	?	Hail (0.75)
St. Joseph County 2 N Mishawaka South Bend Mishawaka	16 16 16	1943EST 1945EST 1950EST			0 0 0	0 0 0	?	?	Hail (1.50) Hail (1.50) Hail (1.75)
	nur	rn fields and nerous cars nage.	l gardens v at dealer	vere dama ships alon	ged by g Mo	y larg Kinle	ge haild ey Ave	north c enue a	of Mishawaka. Large hail damaged and Grape Road causing \$300,000
Elkhart County Elkhart	16	2020EST			0	0	?	?	Hail (0.75)
	Wi	nds estimate	ed at 40 to	50 mph d	owne	d seve	eral tre	es and	power lines.
Howard County Kokomo	20	0930EST			1	4	?	?	Lightning
	Lig in i	htning struc metal lawn	k a tree no chairs unde	orth of Koler the tree.	como (M4	killin 160)	g one a	and inj	uring four persons who were seated
Randolph County Lynn	20	1447EST		•	0	0	?	?	Thunderstorm Winds
	Sev aut	eral large omobiles.	trees and	tree limbs	wer	e blo	wn do	wn ca	using damage to power lines and
Putnam County 3 E Cloverdale	20	1830EST			0	0	?	?	Thunderstorm Winds
	Sev Tre	veral 3- to 4 be tops were	-foot-diam damaged	eter trees in an area	were 40 ya	blowi irds w	n dowr vide an	ı. Atd 1.5 ı	parn roof and doors were damaged. miles long.
Shelby County Shelbyville	29	1550EST			0	0	?	?	Thunderstorm Winds
	One	e large tree	and severa	l large lin	ıbs w	ere bl	own de	own or	roads and power lines.
Sullivan County Carlisle	29	1852EST	·		0	0	?	?	Thunderstorm Winds
	Thu	understorm	wind gusts	to 55 mp	h dow	med p	power !	lines a	nd trees.
IOWA			•						
Adair County 6 N Fontanelle	04 04	1654CST 1654CST			0	0	3 4	4	Hail (1.00) Thunderstorm Winds (G50+)
Warren County Norwalk Hartford Hartford 1 W Indianola	04 04 04 04	1843CST 1900CST 1907CST 1926CST			0 0 0	0 0 0 0	4 4 4 4	3 3 4	Thunderstorm Winds (G50+) Thunderstorm Winds (G52) Thunderstorm Winds (G52) Thunderstorm Winds (G50+)
Mahaska County 7 W Oskaloosa	04	1948CST			0	0	0	0	Funnel Cloud
Marion County Tracy Pella	04 04	1948CST 1954CST			0	0	0	0	Funnel Cloud Thunderstorm Winds (G50+)

JULY 1990

		TIME			NO. PER	OF SONS	EST!	AGE	
PLACE	D A	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K- Leed	- A J DRIMO	- COM (CO)	COOO.	CHARACTER OF Storm

IOWA Cont'd

Mahaska County New Sharon	04	2020CST			0	0	4	3	Thunderstorm Winds (G50+)
Linn County 2 SW Martelle	04	2220CST	0.3	20	0	0	3	3	Tornado (F0)

Thunderstorms developed explosively along a cold front during the late afternoon hours. High winds downed a barn in Adair County and another in Warren County. Trees were downed in Adair, Warren, and Marion counties. There were reports of one-quarter- to one-half-inch-diameter hail in many of the thunderstorms, but only one significant hail report was received. One-inch-diameter hail fell north of Fontanelle. Later in the evening, one cell became severe in Linn County. A tornado touched down briefly in a rural area southwest of Martelle. The only damage was to some trees and power lines in that area.

2 NW Mt Ayr	Ringgold County				_	_		
1/2 SE Kellerton 09 1720CST 0 0 0 Funnel Cloud Decatur County Pleasanton 09 1730CST 0 0 4 3 Thunderstorm Winds (G50+) Wayne County Allerton 09 1753CST 0 0 5 4 Thunderstorm Winds (G56) 7 W Allerton 09 1759CST 0 0 4 4 Thunderstorm Winds (G56) Corydon 09 1815CST 0 0 3 3 Thunderstorm Winds (G50+) Humeston 09 1815CST 0 0 3 3 Thunderstorm Winds (G50+) Appanoose County 2 1/2 NNE Plano 09 1815CST 0 0 0 Funnel Cloud Centerville 09 1840CST 0 0 5 4 Thunderstorm Winds (G63) Davis County 1903CST 0 0 5 4 Thunderstorm Winds (G56) Wast Des Moines 2030CST 0 0 0 Funnel Cloud Des Moines County 0 0 0 0	2 NW Mt Ayr	09	1650CST	Õ	Ŏ	Q		Funnel Cloud
Decatur County	Tingley				Ň	4	4	Thunderstorm Winds (G50+)
Pleasanton		UY	1720CS1	U	U	U	U	Funnel Cloud
Wayne County Allerton 09 1753CST 0 0 5 4 Thunderstorm Winds (G56) 7 W Allerton 09 1759CST 0 0 4 4 Thunderstorm Winds (G56) Corydon 09 1815CST 0 0 3 3 Thunderstorm Winds (G50+) Humeston 09 1815CST 0 0 0 Funnel Cloud Appanoose County 0 1840CST 0 0 0 Funnel Cloud Centerville 09 1840CST 0 0 5 4 Thunderstorm Winds (G63) Davis County 5 NW Drakesville 09 1847CST 0 0 5 4 Thunderstorm Winds (G56) Wapello County 09 1930CST 0 0 0 Funnel Cloud Polk County 09 1930CST 0 0 0 Funnel Cloud Polk County 09 1930CST 0 0 0 Indenter County B	Decarir County	Δ0	1720CCT	^	Λ	4	2	Thursdoortoom Winds (C50.1)
Allerton 09 1753CST 0 0 5 4 Thunderstorm Winds (G56) 7 W Allerton 09 1759CST 0 0 0 4 4 Thunderstorm Winds (G56) Corydon 09 1815CST 0 0 3 3 Thunderstorm Winds (G50+) Humeston 09 1815CST 0 0 3 3 Thunderstorm Winds (G50+) Appanoose County 2 1/2 NNE Plano 09 1815CST 0 0 0 5 4 Thunderstorm Winds (G63) Davis County 5 NW Drakesville 09 1847CST 0 0 5 4 Thunderstorm Winds (G63) Wapello County 2 S Ottumwa 09 1903CST 0 0 0 5 Tunnel Cloud Polk County 09 1930CST- West Des Moines Des Moines County Burlington 09 2020CST 0 0 0 3 3 Thunderstorm Winds (G52) Henry County Mt Pleasant 09 2020CST 0 0 3 3 Thunderstorm Winds (G50+) Louisa County Lo		U9	1730C31	U	U	4	3	Thunderstorm winds (G30+)
7 W Allerton 09 1759CST 0 0 4 4 Thunderstorm Winds (G56) Corydon 09 1815CST 0 0 3 3 Thunderstorm Winds (G50+) Humeston 09 1815CST 0 0 3 3 Thunderstorm Winds (G50+) Appanoose County 09 1815CST 0 0 0 Funnel Cloud Centerville 09 1840CST 0 0 5 4 Thunderstorm Winds (G63) Davis County 09 1847CST 0 0 5 4 Thunderstorm Winds (G56) Wapello County 09 1930CST 0 0 0 Funnel Cloud Polk County 09 1930CST 0 0 5 0 Lightning Des Moines 2030CST 0 0 3 3 Thunderstorm Winds (G52) Henry County Mt Pleasant 09 2020CST 0 0 3 3 Thunderstorm Winds (G50+) Hollsboro 09 2038CST 0 0 3 3		00	1752CCT	Λ	Λ	5	A	Thundaretorm Winds (CS6)
Appanoose County 2 1/2 NNE Plano 09 1815CST 0 0 0 0 0 0 Funnel Cloud				X	X	Ā		
Appanoose County 2 1/2 NNE Plano 09 1815CST 0 0 0 0 0 0 Funnel Cloud		03	1737C31 1815CST	X	ň	3	3	Thunderstorm Winds (G50±)
Appanoose County 2 1/2 NNE Plano 09 1815CST 0 0 0 0 0 0 Funnel Cloud	Humeston		1815CST	ň	ň	รั	รั	Thunderstorm Winds (G50+)
2 1/2 NNE Plano		0)	1015651	v	J	,	3	i nundoistoi in white (C50 i)
Centerville	2 1/2 NNE Plano	09	1815CST	0	0	0	0	Funnel Cloud
Davis County 5 NW Drakesville 09 1847CST 0 0 0 5 4 Thunderstorm Winds (G56) Wapello County 2 S Ottumwa 09 1903CST 0 0 0 0 Funnel Cloud Polk County 09 1930CST 0 0 5 0 Lightning Des Moines County Burlington 09 2020CST 0 0 3 3 Thunderstorm Winds (G52) Henry County Mt Pleasant 09 2020CST 0 0 3 3 Thunderstorm Winds (G50+) Hillsboro 09 2038CST 0 0 3 3 Thunderstorm Winds (G50+) Louisa County	Centerville		1840CST	ŏ	Ŏ	5	Ă	
5 NW Drakesville 09 1847CST 0 0 5 4 Thunderstorm Winds (G56) Wapello County 09 1903CST 0 0 0 Funnel Cloud Polk County 09 1930CST 0 0 5 0 Lightning West Des Moines 2030CST 0 0 5 0 Lightning Burlington 09 2020CST 0 3 3 Thunderstorm Winds (G52) Henry County Mt Pleasant 09 2020CST 0 3 3 Thunderstorm Winds (G50+) Hillsboro 09 2038CST 0 0 3 3 Thunderstorm Winds (G50+) Louisa County 10				•	_		-	
Wapello County 0 0 0 0 0 Funnel Cloud Polk County 09 1930CST- 0 0 5 0 Lightning West Des Moines Des Moines County 09 2020CST 0 3 3 Thunderstorm Winds (G52) Henry County Mt Pleasant 09 2020CST 0 0 3 3 Thunderstorm Winds (G50+) Hillsboro 09 2038CST 0 0 3 3 Thunderstorm Winds (G50+) Louisa County 10		09	1847CST	0	0	5	4	Thunderstorm Winds (G56)
2 S Ottumwa 09 1903CST 0 0 0 Funnel Cloud Polk County 09 1930CST West Des Moines Des Moines County Burlington 09 2020CST 0 0 3 3 Thunderstorm Winds (G52) Henry County Mt Pleasant 09 2020CST 0 0 3 3 Thunderstorm Winds (G50+) Hillsboro 09 2038CST 0 0 3 3 Thunderstorm Winds (G50+) Louisa County								,
West Des Moines 2030CST 0 0 5 0 Lightning Des Moines County 09 2020CST 0 0 3 3 Thunderstorm Winds (G52) Henry County Mt Pleasant 09 2020CST 0 0 3 3 Thunderstorm Winds (G50+) Hillsboro 09 2038CST 0 0 3 3 Thunderstorm Winds (G50+) Louisa County 10 0<	2 S Ottumwa	09	1903CST	0	0	0	0	Funnel Cloud
Des Moines County Burlington 09 2020CST 0 0 3 3 Thunderstorm Winds (G52)	Polk County	09	1930CST-					
Burlington 09 2020CST 0 0 3 3 Thunderstorm Winds (G52) Henry County Mt Pleasant 09 2020CST 0 0 3 3 Thunderstorm Winds (G50+) Hillsboro 09 2038CST 0 0 3 3 Thunderstorm Winds (G50+) Louisa County 10 0	West Des Moines		2030CST	0	0	5	0	Lightning
Henry County Mt Pleasant Hillsboro O9 2020CST O0 0 3 3 Thunderstorm Winds (G50+) O9 2038CST O0 0 3 3 Thunderstorm Winds (G50+) Course County	Des Moines County				_	_		
Mt Pleasanf 09 2020CST 0 0 3 3 Thunderstorm Winds (G50+) Hillsboro 09 2038CST 0 0 0 3 3 Thunderstorm Winds (G50+) Louisa County	_Burlington	09	2020CST	0	0	3	3	Thunderstorm Winds (G52)
Louisa County	Henry County		2020 CCT	_		_	<u>.</u> .	m 1
Louisa County	Mt Pleasant		2020CST	Ŏ	Ŏ	3	3	Thunderstorm Winds (G50+)
Morning Sun 09 2113CST 0 0 0 3 3 Thunderstorm Winds (G52)		UY	2038CS1	U	U	3	3	I hunderstorm Winds (G50+)
morning sun 09 2113C31 0 0 3 3 1 hunderstorm winds (G32)	Louisa County	ω.	2112/CCT	^	^	2	2	There do not now \$150 do (C52)
	wound 2m	(J	2115(31	· U	U	3	3	inunderstorm winds (G32)

An area of thunderstorms developed over northwestern Missouri and moved into southern Iowa. The leading edge contained severe thunderstorms. There were numerous reports of funnel clouds, high winds, and some small hail. The strongest winds were in Wayne and Appanoose counties, with gusts of 60 to 75 mph. A church was partially destroyed in Decatur County at Pleasanton. Many trees and power lines were downed in southern Iowa. Strong winds in northern Ringgold County damaged buildings on a farm there. Pea- to marble-size hail, driven by the high winds, caused considerable crop damage in the area. Thunderstorms north of this area wreaked havoc in West Des Moines. Twelve houses were struck by lightning there. Damage ranged from \$2,000 to \$30,000 to each of the houses.

Hamilton County 2 1/2 SE Jewell	11	1604CST	0.1	15	0	0	3	2	Cold Air Tornado (F0)
Story County 2 1/2 W Story City	11	1604CST			0	0	0	0	Cold Air Funnel
Hardin County 1 S Union	11	1630CST	0.1	15	0	0	3	2	Cold Air Tornado (F0)

JULY 1990

		TIME			NO. PER	OF SONS	EST II	MATED NGE	
PLACE	Đ	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K)	CHWCLE		WOODE	CHARACTER Of Storm

IOWA Cont'd

An area of thunderstorms moved south across Iowa. A cold-air funnel was reported in Story County. Two cold-air tornadoes were reported; one in Hamilton County, the other in Hardin County. These were brief touchdowns with little damage reported.

 Story County Nevada
 12 0415CST- 0515CST
 0 0 5 3 Urban Flooding

 Eastern Polk County 12 0515CST- 0800CST
 0 0 5 4 Flash Flood

An area of showers and embedded thunderstorms was moving southeast across Iowa. The storms intensified in central Iowa as an upper air low pressure center developed over northern Iowa. Urban street flooding occurred in Nevada, as a strong thunderstorm developed and dropped 5 inches of rain there in less than 2 hours. A thunderstorm cell merger took place over northeast Polk County. Rainfall of 2 to 3 inches in a little over an hour caused flash flooding. Streets in Des Moines had as much as 4 feet or more of water in places. Numerous manhole covers were blown off by the water pressure, and a few streets were washed out.

IAZ010-014 Central into Southeastern Iowa

12 0600CST-17 1800CST

0 0 6 5 Flooding

On the morning of the 12th, heavy rains fell over central Iowa. Rainfall of 3 to 6 inches fell over Story, eastern Polk, and Marshall counties. The rainfall caused renewed flooding on the Iowa and Skunk Rivers. River crests were generally 1 to a little over 3 feet over flood stage.

Palo Alto County Emmetsburg

18 0630CST

0 0 4 0 Lightning

Thunderstorms moved over Palo Alto County during the early morning hours. Lightning struck a church in Emmetsburg, causing serious roof damage.

Sioux County Sioux Center

18 0820CST

0 0 4 5 Hail (1.75)

A thunderstorm developed over southeastern South Dakota and quickly grew into a strong cluster of storms. Golf ball-size hail fell in Sioux County. There were numerous reports of pea- to marble-size hail. Three miles west of Sanborn, in O'Brien County, marble-size hail covered the ground. Later that afternoon, a cell developed along the outflow boundary in Audubon County. This cell produced 30 to 40 mph winds and marble-size hail at Exira.

		P							
Woodbury County Sioux City	19	1300CST- 1430CST			1	1	5	2	Urban Flood
Polk County Des Moines Des Moines	19 19	1300CST- 1400CST 1530CST- 1700CST			0	0	5 5	2 2	Urban Flood Urban Flood
Wayne County 1 E Humeston	19	1629CST	0.1	15	0	0	2	2	Tornado (F0)
Lee County Fort Madison	19	1930CST			0	0	0	0	Funnel Cloud
Des Moines County Danville	19	1930CST			0	0	0	0	Funnel Cloud

Thunderstorms erupted over Iowa during the afternoon hours. The main feature with them was heavy rain. Some pea- to marble-size hail was reported in Lucas County. A basement of a house collapsed in Sioux City as 3.60 inches of rain fell in an hour, causing flooding in the city. A 13-year-old boy was killed, and an 11-year-old girl injured in Sioux City as the flood waters

'	510	MW DAI	A AUID	CNOSO	'ALL	V V 11221		K F1	IENOMENA
	T	TIME			NO.	OF SONS	ESTIN DAMA	MATED	JULY 1990
PLACE	DA	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH PATH (YARDS)	Ko-L-win	ם שמכר ב-	4-cam 00:00	CRODA	CHARACTER OF STORM
IOWA Cont'd									
	hou wer sma	ines. The ir. The sec re flooded a all tornado o	first cause ond storm nd a few ast of Hu	d minor u dumped 1 were close neston. It	rban to 2 d for touc	floodi inche a wh hed do	ng as (s over nile. (own on	0.50 to the sa One sto lly brie	Two flood events took place in Desponding in the place in Desponding in the street of the street of the street in the street of the street in
Decatur, Ringgold Counties	20	0036CST- 0530CST			0	0	6	5	Flash Flood
	Hea Tha	avy rains fel ree to 6 inch	ll across so	outhern Io	wa. than (The he	eaviest s, caus	was o	ver Ringgold and Decatur counties. nsiderable flooding in both counties.
IAZ010-013-014 Central, South Central, and Southeastern Iowa	20 24	0600CST 1500CST	•		0	0	6	5	Flooding
	hea exte	the night over the ensive on the sted anywhe	ne south-co e Thompso	entral, wes on, Skunk,	st-cen Iowa	tral, a , Char	nd cen iton, a	hes of tral pa nd low	rain fell over all of Iowa, with the rts of the state. Flooding was quite ver Des Moines Rivers. These rivers
IAZ007-008-010- 011-014									
Central and East Central Iowa	20	1200CST- 1745CST			0	0	0	0	Numerous Cold Air Funnels
	nur	ine of show nerous cold nson, and A	air funnel	s were sig	ns de hted.	velope The	ed ove most fi	r east- requen	central Iowa. Behind a cold front, t sightings came from Butler, Linn,
Emmet County Armstrong	24	1950CST			0	0	3	4	Hail (1.00)
	pea eve	lated thunde -size hail tu- ning, one co meter.	rstorms de med the gr ell dumpe	veloped ov cound whited hail in	er ce e 7 m Arm	ntral a iles no strong	nd north of . A f	th-cent Jeffers ew of	ral Iowa. During the late afternoon, son, in Greene County. Later in the the stones were up to an inch in
Webster County 1 NE Vincent	25	1740CST	0.1	15	0	0	2	2	Tornado (F0)
	Thu of	inderstorms Vincent. Th	moved ov ne tornado	er Webste touched d	r Cor lown	inty. briefly	One o	f them corn fi	dropped a small tornado northeast eld and caused very little damage.
Ringgold County 2 SW Ellston 2 NE Ellston	25	1850CST- 1905CST	4.0	75	0	0	5	4	Tornado (F2)

An isolated thunderstorm moved across Ringgold County. A tornado touched down in the Ellston area. Two farmsteads were damaged considerably; one southwest, and one northeast of Ellston. A few houses were damaged in Ellston. One was twisted from its foundation, causing considerable damage to the house.

Page County 4 N Shenandoah Shenandoah		1830CST 1835CST			0	0	4 4	2	Thunderstorm Winds (G50+) Thunderstorm Winds (G50+)
Montgomery County 12 N Shenandoah	25	1930CST	0.3	30	0	0	5	3	Tornado (F0)

JULY 1990

		TIME			NO. PER	OF SONS	EST I	AGE	
PLACE	DA)-E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	r L	Omacle 2-	~-cam 00a 0	COCOON .	CHARACTER OF STORM

IOWA Cont'd

Climax

25 1930CST

0 0 4

Thunderstorm Winds (G50+)

Thunderstorms moved over southwestern Iowa. During the early stages of thunderstorm development, severe weather occurred over Page County. High winds occurred in and north of Shenandoah. Trees were uprooted, and a barn roof was taken off north of Shenandoah; shingles and trees were also damaged. In Montgomery County, a tornado touched down briefly 12 miles north of Shenandoah. Several farm buildings were destroyed there. High winds in the Climax area also damaged several farm buildings.

Fremont, Mills, Montgomery, Page, Pottawattamie Counties

25 1830CST-26 0200CST

0 6 6 Flash Flood

A thunderstorm complex moved into southwestern Iowa. Very heavy rains occurred, with 5 to nearly 10 inches falling on the area in about 6 hours time. Flooding was extensive, with creeks and rivers in the area reaching near-record high stages. The heaviest rains fell in Fremont County, with 12.08 inches reported at Imogene, 8.93 at Randolph, and 7.10 at Sidney. Some additional rainfall occurred after the flash flood event. Dozens of roads were closed by high water and field erosion was extensive. Some mud slides were reported, and a few bridges were washed out on county roads. Three dozen people were evacuated at Thurman, and one family at Riverton. Two feet of water covered a six-block area in Thurman for a time. Similar conditions were reported in Mills County, as 10.20 inches of rain fell the southwestern corner of the county, and 11.30 inches in the southeastern corner. In Page County, Highway 59 was closed for a time 1 mile south of Shenandoah, as 6.05 inches of rain fell there. In Pottawattamie County, the heavy rainfall was mainly over the eastern half. The heaviest total was in Oakland, where 7.37 inches fell.

IAZ012-009-NEZ010 25 2100CST-Southwestern Iowa 31 2400CST

0 0 7 6 Flooding

On the night of the 25th, heavy rain fell over southwestern Iowa. Six to 9 inch rainfall amounts were common over the southwest corner, with 2 to 6 inch amounts extending into west-central Iowa. The heaviest amounts were in the Imogene and Randolph areas. Randolph recorded 11 inches of rain from the storms, while unofficially, 13 inches fell in Imogene. This caused a near-record flood on the Nishnabotna River, 12 feet over flood stge, and significant rises on other streams in western Iowa. Damage was in the millions of dollars. There was also considerable agricultural flooding.

IAZ002-006-007-010-011-012-014 North Central and much of Eastern Iowa

26 1800CST-31 2400CST

0 0 7 6 Flooding

On the night of the 26th, heavy rain affected central and north-central Iowa, where anywhere from 2 to 6 inches of rain fell. The heaviest rains fell in the Rockwell and Sheffield areas, where between 6 and 8 inches was recorded. This caused record flooding on the West Fork of the Cedar River, and major flooding on the Cedar, Iowa, Shell Rock, and Skunk Rivers as well as Beaver and Black Hawk Creeks.

Polk County Des Moines 27 0330CST-0800CST

0 0 4 2 Urban Flooding

One to 2 inches of rain fell over the city within a 2-hour-period. Flooding resulted on several streets during the morning rush hour. On some streets, the water was 3 to 4 feet deep. Creeks in the city rose to near bank full.

Hamilton, Hardin Counties 7 1045CST-1500CST

0 0 6 5 Flash Flood

	_	 :	<u> </u>	T	NO	OE .	ECTI	MATED	JULY 1990
		TIME			PER	SONS		MATED AGE	
PLACE	P	LOCAL STANDARD	LENGTH OF PATH	WIDTH OF PATH		Ì	R	W TO COOL	CHARACTER STORM
	E		(MILES)	(YARDS)	E) Outro	own october	Š	STORM
	<u> </u>				L_	D	¥		
IOWA Cont'd		•				•			
Northern Franklin, Southern Cerro Gordo Counties	27	1100CST- 1445CST	• •		0	0	6	5	Flash Flood
	An- Du	avy rains of other round ring a 3-hou hways were	l of thund r-period, a	lerstorms d in additiona	levelo al 2 in	oped oches	reas di over ti of rain	uring these confell, ca	he 24 hours prior to the flash flood. ounties during the morning hours. ausing flash flooding. Several major
Boone County Woodward	28	1515CST			0	0	3	3	Thunderstorm Winds (G50+)
•	An mo	isolated the	inderstorm the Wood	i developed Iward area	l ove . Se	r cent veral l	ral Iov large t	va. Th	nis storm produced high winds as it ere blown down in the city.
KANSAS									
Rooks County 1 1/2 S Stockton	04	2012CST			0	0	4	4	Hail (2.00)
Rooks County Stockton	04	2028CST			0	0	0	0	Hail (0.75)
Geary County Ft Riley (ARPT)	09	1200CST			0	0	4	0	Thunderstorm Wind (G50)
Riley County Manhattan	09	1200CST			0	0	4	0	Thunderstorm Wind (G60)
Gray County 5 W Montezuma	15	1600CST			0	0	0	0	Hail (1.00)
Grant County 5 E Ulysses	15	1807CST			0	0	0	0	Hail (0.75)
Grant County 5 E Ulysses Stevens County	15	1807CST			0	0	0	0	Thunderstorm Wind (G55)
3 SW Moscow	15	1842CST			0	0	0	0	Thunderstorm Wind (G50)
	afte	ernoon hour	s. There	were repo	orts	of larg	ge hail	and s	sas and became severe in the late strong winds in an area from near the southwest.
Butler County 5 NNE Augusta	21	1353CST	0.1	25	0	0	0	0	Tornado (F0)
	qui	small tornad ckly. The rado.	lo touched same thur	down 5	miles prodi	norti	n-north secon	nwest on nd sma	of Augusta at 1353 CST but lifted all tornado 2 miles northeast of El
Butler County 1 W Leon	21	1410CST	2.0	10	0	0.	3	0	Tomado (F0)
	A 1	roof was tak	en off a ti	n building					
Butler County 2 NE El Dorado	21	1425CST	0.1	10	0	0	0	0	Tomado (F0)
	Thi tree		ado touch	ed down b	riefly	near	El Do	rado L	ake. The only damage was to some
Rawlins County 15 SE Atwood	23	1435CST			0	0	4	4	Hail (1.75)
Decatur County 10 W Oberlin	23	1445CST			0	. 0	4	4	Hail (1.00)

Three-foot drifts of hail were left alongside roads during the storm.

		7145			NO.	OF SONS	EŞŢĮŅ	MATED	JULY 1990
	D	LOCAL	LENGTH	WIDTH	K	SUNS			
PLACE	Ē	STANDARD	PATH (MILES)	WIDTH OF PATH (YARDS)	I E D		oan o ox o	OTONO.	CHARACTER OF STORM
	<u> </u>			<u> </u>	<u></u>	ע	¥		
KANSAS Cont'd	i			•					
Logan County Oakley	23	1733CST			0	0	4	4	Hail (1.00)
Logan County Oakley	23	1733CST			0	0	4	4	Thunderstorm Wind (G60)
Kearney County 18 W Lakin	24	1815CST			0	0	3	3	Hail (1.00)
Kearney County 4 E Kendall	24	1820CST			0	0	3	3	Hail (0.75)
Hamilton County 10 S Kendall	24	1859CST			0	0	4	4	Hail (0.75)
Kearney County 10 SSE Kendall	24	1907CST			Ó	0	4	4	Hail (0.75)
Stanton County Big Bow	24	1920CST		•	0	0	0	0	Thunderstorm Wind (G50)
Grant County 12 NW Ulysses	24	1925CST			0	0	0	3	Hail (1.00)
Grant County 10 NW Ulysses	24	1930CST			0	0	0	3	Hail (1.00)
Grant County 4 W Ulysses	24	1955CST			0	0	0	3	Hail (1.00)
Grant County 8 S Ulysses	24	2010CST			0	0	0	3	Hail (1.00)
Stevens County Moscow	24	2050CST			0	0	0	3	Thunderstorm Wind (G50)
	The	understorms thundersto ducing wind	rms becan	ne severe i	n an	area f	rom K	endall	Colorado and northwestern Kansas. to Moscow dropping large hail and minimal.
Rooks County Webster Lake	25	1442CST			0	0	4	4	Hail (0.75)
Rooks County Damar	25	1530CST			0	0	0	0	Hail (0.75)
Rooks County Damar	25	1600CST	•		0	0	4	4	Hail (1.75)
•	Thr	ree- and fou	r-tenths in	ches of rai	n fel	l in 2	hours	in add	ition to the hail.
Rooks County Webster Dam	25	1730CST			0	0	0	0	Hail (0.75)
	Thu	understorms	developed	d in the Hi	ll Ci	ty are	a and	moved	east into Rooks and northern Ellis
Russell County	cou	inties, where	e the storn	ns remaine	d for	2 to	4 hour	s, with	3- to 5-inch rainfall amounts.
Russell Airport Russell County	25	1913CST			0	0	3	3	Hail (1.00)
Bunker Hill	25	1935CST			0	0	3	3	Hail (1.00)
Russell County 1 S Russell	25	1949CST			0	0	3	3	Hail (0.75)
Russell County Lucas	25	2020CST			0	0	4	4	Flash Flood
_ 1.	Hea	avy rain cau	sed flash	flooding fr	om 2	020 C	CST to	2240	CST.
Russell County 1 W Russell	25	2031CST			0	0	3	3	Hail (1.75)
Ellsworth County Black Wolf	25	2040CST			0	0	3	3	Thunderstorm Wind (G52)
	~	.1 1		1					

Severe thunderstorms moved across Russell and northern Ellsworth counties. Hail up to golf ball-size fell near Russell and 60 mph winds were reported northwest of Ellsworth at Black Wolf. Heavy rain fell across northeastern Russell County. Luray reported 4.50 inches in one hour. This heavy rain caused some flash flooding in the Lucas area.

	1		r		l NO		Lectu	MATER		JULY 1990
		TIME			PER	SONS	ESIM	MATED AGE		
	R	LOCAL	LENGTH	WIDTH OF PATH	K	Į,	B	ç	CHARACTER	
PLACE	Ę	STANDARD	PATH	1	E	7	Dacoomor.	NTO20	CHARACTER OF Storm	-
	-		(MILES)	(YARDS)	Ē	Desire	E	S		
				İ		D	Ţ		•	
		-		<u> </u>	<u> </u>					-J
KANSAS Cont'd				·•	•					
Ellsworth County Ellsworth	26	0015CST			0	0	· 4	4	Flash Flood	
	He	avv rains o	f over 5 i	nches com	ക്ക് ജ	nme f	lach fl	looding	along the Smoky	Hill River near
	Ell	sworth betw	een 0015	CST and C	230	ĊŠŤ.	IOOU II	Manue	g along the Smoky	Tim River near
Geary County										·
Milford Lake	26	0253CST			0	0	4	0	Thunderstorm V	Vind (G60)
	Tre	es were hio	sum dosum :	and a hoat	dock	was	daman	ed on	the northern end o	f Milford Lake
	110	AS WOLC DIO	WII GOWII	anu a voat	ucca	was	uamag	CG OII	me normern end o	Millord Lake.
Shawnee County Topeka	26	0255CST			0	0	0	0	Thunderstorm V	Vind (G50)
-	20	025001				•		•	indicolocolm (· ma (050)
Thomas County Brewster	26	1832CST			0	0	4	4	Hail (0.75)	
	200	1032001			·		•	•	1141 (0.75)	
Graham County Hill City	26	1840CST			0	0	3	3	Hail (0.75)	
•	20	1010031			•	•	,	•	11an (0.75)	
Thomas County Brewster	26	1930CST			0	0	0	0	Hail (0.75)	
Dicwstor						-	_			
	Ov	er 6 inches	of rain fell	l in 4 hour	s cau	sing 1	minor:	floodin	g in addition to th	e hail.
Ellsworth County				,	_	_	_	_		
Ellsworth	27	0730CST			0	0	6	4	Flash Flood	
	Fla	sh flooding	occurred a	long the S	moky	Hill	River	from 0	730 CST to 1100 C	CST due to heavy
	rair	ns of up to 7	inches. O	fficials eva	cuate	xd 15	familie	es along	the Smoky Hill R	iver at Ellsworth.
Ottawa County						_	_			
Tescott	27	0730CST			0	0	6	4	Flash Flood	•
	Ru	noff from ra	ins of up	to 10 inche	es açı	oss s	outhern	n Linco	oln County caused	flash flooding in
	the	Tescott area	a between	0730 CST	and	1100	CST.		-	_
Dickinson County					_	_	_	_		
Northwest corner	27	1710CST			0	0	3	3	Hail (0.75)	
Ottawa County										
Tescott	27	1710CST			0	0	5	3	Flash Flood	
	Thu	understorms	dropped n	early 3 inc	hes c	of rain	in the	Tesco	tt area in a little o	ver 1 hour. This
	hea	vy rain on to 1915 CST.	op of a floo	oded Saline	Rive	er at T	escott	caused	additional flooding	g from 1710 CST
n 41	W I	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
Saline County 2 N Salina	27	1711CST			0	0	3	3	Thunderstorm W	lind (CS2)
	41	min			v	v	J	J	THURIOGISWIII W	IIII (032)
Lincoln County 2 E Beverly	27	1720CST			0	0	3	3	Thunderstorm W	/ind (G56)
•	21	1120031				U		,	Thurdersoning A	mu (OSO)
Lincoln County	27	1 <i>7</i> 20000T			C	Λ	3	3	Thursdoons W	lind (CSO)
2 S Beverly	27	1720CST			0	0	3	3	Thunderstorm W	ma (020)

3

3

0

3

3

Hail (0.75)

Thunderstorm Winds (G60)

Clay County Longford

Dickinson County 7 N Elmo

27 1755CST

27 1820CST

<u></u>	, —			т	Luc	25	F07.11	I	JULY	1990
		TIME			PER	SONS	ESTIM DAMA	GE		
PLACE	D E	LOCAL STANDARD	LENGTH OF PATH	WIDTH OF PATH	Ķ	Ŋ	8	COCODA	CHARACTER OF STORM	
) LAGE	Ė	O MIDANO	(MILES)	(YARDS)	5	Omac.	-compo	Š	STORM	
			1			Ď	1	Ĭ		
KANSAS Cont'd										
Clay County Clay Center	27	1824CST			0	0	3	3	Hail (0.75)	
Clay County Clay Center	27	1824CST			0	0	3	3	Thunderstorm Winds (G52)	
	Severe thunderstorms moved across a part of central and north-central Kansas. The storms dropped three-quarter-inch hail and caused wind gusts up to 70 mph that uprooted trees and damaged some farm buildings.									orms s and
Geary County Milford Lake	27	1840CST			0	0	3	0	Thunderstorm Winds (G50)	
Morris County Council Grove	27	1845CST			0	0	0	0	Thunderstorm Winds (G60)	
	The the	southern e Council Gr	end of a cl ove Reser	uster of the	under	rstorm	s prod	uced s	ome tree and power line dama	ge at
Ford County Dodge City	27	1900CST			0	1	0	0	Lightning	
	A lightning strike injured one man.									
Marshall County 1 SE Blue Springs	27	1920CST			0	0	0	0	Hail (0.75)	
Waubaunsee County Alma	27	1935CST			0	0	0	0	Hail (0.75)	
Pottawattomie Count Wamego	y 27	1940CST			0	0	0	0	Thunderstorm Winds (G55)	
	Mii hail	nor tree dan	nage occur	rred on the	nort	heaste	ern side	of Wa	amego with reports of one-half	-inch
Sherman County Goodland Airport	27	2228CST			0	0	3	0	Thunderstorm Winds (G52)	
	Thu	inderstorm	winds caus	sed damage	e to t	rees.				
KENTUCKY										
Letcher County	01	1435EST			0	0	3	2	Thunderstorm Wind	
	Sev	eral large to	rees were	blown dow	n in	the w	estern 1	part of	the county.	
Harlan County	01	1553EST			0	0	3	2	Thunnderstorm Wind	
	Sev	eral large to	rees were 1	blown dow	n nea	ar the	Harlan	and I	Bell county line.	
Bell County	01	1630EST- 1650EST			0	0	3 4	3	Hail (2.00) Thunderstorm Wind	
	dan	enty-five str naged house st of the cit	es and veh	icles as the	ey fel	l and	severa	hous	by falling trees. Several of the es were damaged by the large	trees hail.
Elliot County	01	1735EST			0	0	3	2	Thunderstorm Wind Hail (1.00)	

Several trees were blown down throughout the county.

	T	1		T	LNO	OE	ECTI	AATED T		JULY 1990
		TIME			PER	SONS	DAM	AGE		
PLACE	D	LOCAL	LENGTH OF PATH	WIDTH OF PATH	Ķ	N	R	CEOPA	CHARACTER OF	
PEAGE	Ė	JIANDARD	(MILES)	(YARDS)	Ē	Ŭ DESELO D	-compo	Š	SŤÓRM	
		 			ן ס	B	K Y			
		J	I	L	<u> </u>	1	<u> </u>	<u> </u>		J
KENTUCKY Co		1750EST			0	0	0	3	II-:1 (1 00)	
Lawrence County	01		1		_	_	_	3	Hail (1.00)	
		rge hail dam	naged seven	rai corn an			•	_		-
Pike County		0035EST			0	0	2	2	Thunderstorm W	
			vere blown	down acre	oss th	e sou	theaste	•	tion of the county i	•
Hart County	09	1650CST			0	0	4	2	Thunderstorm W	'ind
	Sev in	veral trees a Horse Cave	nd power l	lines were	blow	n dov	vn. O	ne mob	oile home and a bar	n were damaged
Clark County	10	1700EST			0	0	3	2	Thunderstorm W	ind
	Str	ong winds of eral power	downed ab outages ne	out 15 tre ar the Ken	es an tucky	d mai Rive	ny pov er.	ver lin	es which blocked r	oads and caused
Bath County	10	1715EST			0	0	3	2	Thunderstorm W	ind
	Sev	eral trees w	vere blown	down in t	he sn	nall co	ommu	nity of	Salt Lick.	
Whitley County	10	1730EST			0	0	3	2	Thunderstorm W	'ind
	Several large trees were blown down in Tallersall Trails. One tree damaged a house.									house.
Laurel County	10	1740EST			0	0	3	2	Thunderstorm W Hail (1.50)	ind
	Str	ong winds b	olew the si	ding from	a hou	ise an	d dow	ned se	veral large trees.	
Menifee County	10	1745EST			0	0	3	2	Thunderstorm W Hail (0.75)	ind
	Tre	es were blo	wn down	in the east	ern po	ortion	of the	count	, ,	
Green County	10	2015EST			0	0	3	2	Thunderstorm W	ind .
•	Wi	nds gusting	to 60 mph	n downed t	rees a	and po	ower li	ines in	Greensburg.	
Morgan County		1630EST	•		0	0	3	2	Thunderstorm W	ind .
	Str		rstorm win	ids uproote	ed tre	es ov	er a v	vide ar	ea of West Liberty	which blocked
Adair County		200 and dov	viieu powe	i ilies.	0	0	3	2	Thunderstorm W	ind.
Adair County			uum daum	th sough out			_	2	Thunderstorm W	Mu
Dulaski Caustu		es were blo	own down	inroughou	0	ount)	y. 3	2	Thunderstorm W	C_4
Pulaski County		1800EST	1	L1	_	-	_	_	I nunderstorm w	ind
W		eral large t	rees were	blown dow						. 1
Kenton County		1635EST			0	0	3	0	Thunderstorm W	
- 11. a		•	rooted by s	strong thur					small community of	-
Pendelton County		1650EST			0	0	3	2	Thunderstorm W	ind
		veral trees w	vere blown	down thro	•			-		
Campbell County	20	1700EST			0	0	3	0	Thunderstorm W	ind

Several large trees were blown down in the city of Fort Thomas.

		TIME			NO.	OF SONS	EST IN	MATED	JI	ULY 1990	
PLACE	D E	D LOCAL LENGTH OF STANDARD PATH (MILES)		WIDTH OF PATH (YARDS)	K-1-FD	1 A J J DRING	PacOpmon-Y	COCOTA	CHARACTER OF STORM		
KENTUCKY Cor	nt'd										
Grayson County	20	1900CST- 1930CST			0	0	3	2	Thunderstorm Wind		
	Tre	es and pow	er lines w	ere blown	down	betw	een Le	eitchfie	ld and Clarkson.		
LOUISIANA											
Cameron Parish Holly Beach	01	1134CST	0.20	20	0	0	0	0	Tornado (F0)		
	A tornado touched down briefly near Holly Beach. No damage was reported.										
Tensas Parish Waterproof	02	1815CST			0	0	?	?	Thunderstorm Wind		
East Carroll Parish 1 S Roosevelt Madison Parish	02	2005CST			0	0	?	?	Thunderstorm Wind		
1 E Tendal 10 W Quimby	02 02	2105CST 2147CST			0	0	0 ?	0 ?	Hail (0.88) Thunderstorm Wind		
	Scar	ttered thund d gusts, wh	lerstorms	in northeas	tern :	Louis	iana pr	roduced branc	l isolated reports of hail an hes.	d strong	
Calcasieu Parish 7 NE Lake Charles		1600CST	0.20	20	0	0	0	0	Tornado (F0)		
	A te	ornado touc	hed down	briefly no	rthea	st of	Lake C	Charles.	No damage was reported	•	
Evangeline Parish 2 W Ville Platte	03	1830CST	0.20	20	0	0	3	0	Tornado (F1)		
	A to	ornado touc vning a few	hed down trees.	west of V	'ille I	Platte	causin	g mino	or damage to a few house re	oofs and	
Bossier Parish Bellvue 3 S Benton 1 NW Bellvue	03 03 03	2025CST 2028CST 2030CST			0 0 0	0 0 0	? ? 0	?	Thunderstorm Wind Thunderstorm Wind Hail (1.00)		
Caddo Parish 3 E Dixie Shreveport	03 03	2040CST 2055CST			0	0	?	?	Thunderstorm Wind Thunderstorm Wind (G5	0)	
Bossier Parish 2 S Plain Dealing 1 N Benton	03 03	2115CST 2120CST			0	0	?	?	Hail (1.00) Thunderstorm Wind		
	alor	inderstorms ng with a fe ets and und	ew reports	of hail.	Brief	a pro , but	duced intens	wind d e rainf	amage to trees in several lo all caused flooding of a nu	ocations, imber of	
St. Mary Parish 3 SW Louisa	12	0800CST			1	2	0	0	Lightning		
	pav Par	ilion, wher k. The elec	e a family ctrical disc	was takin harge fata	g she Ily in	lter d jured	luring the 31	a thun -year-c	ntered through the open siderstorm, at Cypermort Poold father and caused minor ured. (M360).	int State	
MAINE											
Androscoggin County	04	1735EST			0	0	?	0	Thunderstorm Winds		

Trees were blown down in Poland.

			T *****							JULY 1990	
		TIME			PER	OF SONS	ESTIM DAMA	ATED GE			
PLACE	Đ	LOCAL STANDARD	LENGTH PATH (MILES)	WIDTH OF PATH (YARDS)	K-LLED	OmmCL2-	0.8.Оошос->-	CROPA	CHARACTER OF STORM		
MAINE Cont'd											
Lincoln County	04	1750EST			0	0	?	0	Hail (0.75)		
	A s	severe thund	lerstorm di	ropped thro	ee-qu	arter-i	nch ha	il in V	Viscasset.		
Cumberland County	04	2330EST- 2345EST			0	0	5	0	Thunderstorm Wir	nds	
	Wei Nai	Trees were leveled and many power outages were reported in Gorham and Westbrook. Rewere blocked by falling trees in Standish and Gorham. A large tree demolished a garage Naragansett Street in Gorham. In the same town, downed trees crushed a Buick. Two ho and a pool on South Street in Gorham were also damaged by falling trees.									
	04	2340EST- 2350EST			0	0	4	0	Thunderstorm Wir	nds	
	me: aga dar	asured 55 m inst a fence	ph at the F , and colla nd in Sout	Portland Je psed part o h Portland	tport of the	which ceilin	knock g in th	ed dov e fore	and Cape Elizabeth. wn a utility pole, blev cast office. A constr at was blown aground	w a small plane uction site was	
Waldo County	16	1430EST			0	0	4	0	Lightning		
	Lig to 1	htning structure.	k a house	on Main S	treet	in Wi	nterpo	rt caus	ing most of the roof	and a bedroom	
Penobscot County	17	1900EST			0	0	4	0	Thunderstorm Win	nds	
	In I		thundersto	orm winds	down	ed tree	es and p	ower l	ines and knocked dov	vn construction	
York County	20	1215EST			0	0	0	0	Thunderstorm Wir	nds	
	Thi	understorm	winds broi	ight trees	down	in No	orth Be	rwick	•		
	20	1355EST			0	0	4	0	Thunderstorm Win	nds	
	qua	e fighters si irter-mile ar h one striki	ēa near Sha	ady Brook	in Noad	ewfiel . Hig	d. Mo h wind	ost dan s snap	nage in the town occuped and downed trees	urred in a one- in this region,	
Cumberland County	20	1400EST- 1415EST			0	1	?	0	Lightning		
		nan in Gorh one system l			light	ning s	struck :	a powe	er line and then travel	led through the	
	20	1410EST- 1420EST			1 0	1 0	4 ?	0	Lightning Thunderstorm Win	nds	
	Lig Roa kill	htning structed in the sar ed when lig	ck a roof a me town. htning stru	nd damage A golfer v ick a tree	ed a h vas in under	ome i jured whic	in Sout and a h h they	h Port 31-yea took r	land. Trees were do r-old man from South refuge. (O31M)	owned on Dyer h Portland was	
York County	20	1425EST			0	0	?	0	Thunderstorm Win	nds	
	Tre	es and large	e branches	knocked o	ut po	wer f	or 3 ho	ours in	North Waterboro.		
	20	1440EST			0	0	?	0	Thunderstorm Winds		

Trees were blown down in Hollis.

		TIME			NO.	OF SONS	EST IN	MATED	JULY	1990
	D	LOCAL	LENGTH	MIDIH	K	l I				
PLACE	Đ	STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	L	Omac C.	com cooc	W DOOD	CHARACTER OF STORM	
					<u> </u>		¥			
MAINE Cont'd										
Cumberland County	20	1445EST			0	0	4	0	Thunderstorm Winds	
	Hig	gh winds bro	ought trees	down, de	molis	shed o	ne can	nper, a	nd damaged another in Steep F	alls.
	20	1510EST			0	0	?	0	Hail (1.75)	
	Gol	lf ball-size l	nail fell in	Windham	and a	near S	Sebago	Lake.		
Aroostook County	24	1030EST			0	1	0	0	Lightning	
	A 3 the	4-year-old picnic table	man was ir where he	ijured whe was eating	n ligh g.	tning	struck	a near	by tree and traveled undergroun	d to
Cumberland County	24	1245EST			0	0	4	0	Lightning	
	Par ligh	t of a roof, ntning struck	the side of	a house, a Iryer vent	nd w	iring v e seco	were dond flo	amageo or and	d on Lunt Drive in Westbrook. traveled through the house.	The
MARYLAND and	d De	C								
Montgomery County 1 S Rockville District of	01	1345EST			0	0	0	0	Hail (0.75)	
Columbia	01	1350EST			0	0	0	0	Thunderstorm Winds	
	Wir A la	nds to 65 m arge tree wa	ph were re as downed	ecorded at	a tele	visior	1 static	n in th	e northwestern part of the Dist	rict.
Prince Georges County										
Fort Washington	01	1400EST- 1415EST			0	0	0	0	Thunderstorm Winds	
	loci	eral trees wust trees. Eal channelin	stimated v	vinds were	tron	n the i	north a	the tree at 60 n	es were large diameter (up to 2 faph, blowing down-river, there	feet) fore
Anne Arundel County	01	1430EST- 1600EST			0	0	3	0	Thunderstorm Winds Lightning	
	See	details belo	w.						raguding.	
Anne Arundel County 3 S Annapolis Selby Bay	y 01	1430EST			0	0	3	0	Thunderstorm Winds Lightning	
Chesapeake Beach	Fou wer onto	r sailboats or e injured. I o power line	capsized in Lightning es in the C	the South struck a ho hesapeake	River ouse i Beac	(3 mi n Sell h area	iles sou by Bay a causi	ith of A causin ng pov	Annapolis) but none of the occup ig about \$7,000 damage. Trees wer losses to some 1,000 resider	ants fell nts.
Chesapeake Davidsonville	01	1600EST			0	0	3	0	Thunderstorm Winds	
ar ar v a mercen v allev	Trees were downed causing power outages to 1,100.									
Prince Georges	-10			o r 3 1		••	_,,			
County 2 S Clinton	01	1430EST- 1445EST			0	0	0	0	Thunderstorm Winds	

Several trees were reported down.

<u> </u>			<u> </u>	1	1 110	O.F.	COTIN	IATED.		JULY 1990		
		TIME			PER	SONS	ESTIM DAMA	GE				
PLACE	Đ	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	Seri-	- Z J Dormo		OECOEN	CHARACTER OF STORM			
MARYLAND an	d D	.C. Cont'	d									
Charles County Waldorf	01	1445EST- 1500EST			0	0	4	0	Thunderstorm W	inds		
	The	The Civil Defense Director reported power lines down due to trees falling on them; also, tree were down on several houses. All damage appeared to be from straight-line winds.										
Prince Georges Cour Clinton Calvert County	nty 01	1435EST			0	0	0	0	Hail (1.00)			
St. Leonards	01	1500EST- 1530EST			0	0	0	0	Thunderstorm W	inds		
	The	The Civil Defense Director reported winds estimated at 50 to 60 mph with trees down.										
Worcester County Ocean City	01	1630EST			0	0	0	0	Thunderstorm W	inds		
	Fire company reported winds estimated at up to 60 mph.											
Washington County Hagerstown	05	1430EST- 1435EST			0	0	0	0	Hail (1.00)			
	The	ere were sev	eral repor	ts of dime	- to 1	-inch-	size ha	ail aro	und Hagerstown.			
Harford, Cecil, Baltimore, Carroll Counties	05	1500EST- 1530EST			0	0	4	0	Thunderstorm W Hail	inds		
	The	ere were nu	merous rep	orts of da	magii	ng wii	nds in	the for	ur counties. Details	follow.		
Harford County		1500EST	•		0	0	3	0	Thunderstorm W			
•	Ma	ny large tre	es and nun	nerous pow	er lir	ies we	re dow	ned in	the northeastern pa	rt of the county.		
Cecil County Rising Sun		1515EST		•	0	0	3	0	Thunderstorm W. Hail (1.00)			
	Ma hai	ny large tre I was report	es were do ed at Risii	own due to ng Sun.	win	ds esti	imated	at 60	mph. Three-quarte	r- to 1-inch-size		
Baltimore County												
Sparks Towson	05	1530EST- 1550EST			0	2	4	0	Thunderstorm W	inds		
	In the northern part of the county, large trees fell onto about 45 houses, damaging five severely. Numerous power lines were downed. In Sparks, several silos were blown down and several large trees uprooted. In Towson, a woman was slightly injured as she ducked between two cars when the garage they were in collapsed during high winds; another woman was slightly injured as a large tree fell onto her house.											

Carroll County Eldersburg

05 1530EST-1534EST

1534EST

0 0 4 0 Thunderstorm Winds
Lightning

A spotter reported winds in excess of 50 mph at Eldersburg. In the northern part of the county, many large trees were downed. Numerous power lines were downed. Several house and barn fires were caused by lightning. Winds were estimated at 55 to 60 mph.

		TIME			NO. PER	OF SONS	ESTII DAM/	MATED AGE	
PLACE ·	DATE	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K-LLINO K-LLINO	OHING CALL	р. с СОр.шест- у	CROPA	CHARACTER OF STORM

							Ý		
MARYLAND and	i D	.C. Cont'	d						
Dorchester County Church Creek	05	1830EST			0	1	3	0	Thunderstorm Winds
	Wi	nds toppled	two trees	onto a hou	ise tra	uler, s	lightl	y injur	ing a man inside.
Calvert County	05	1700EST			0	0	3	0	Thunderstorm Winds
	Abo pov	out 5,000 c ver lines.	ounty resid	dents were	with	out po	wer a	s a res	ult of thunderstorm winds affecting
Prince Georges									
County District of Columbia Forestville	05	1715EST			0	0	3	0	Thunderstorm Winds
	A s dov	potter at Fo vned and po	restville, n wer was l	near Andrew ost to 40,0	ws AF 00 in	B (AI Prince)W), e Geo	estimat rges C	ted the winds at 60 mph. Trees were ounty and the District of Columbia.
Charles County	05	1730EST			0	0	3	0	Thunderstorm Winds
		nds estimate inty.	ed at 50 km	nots (58 m	ıph), (downe	d tree	es and	power lines at several points in the
Talbot County	05	1750EST			0	0	3	0	Lightning
	Sev	eral fires w	ere caused	l by lightni	ing st	rikes.			
Wicomico County Salisbury	05	1820EST			0	0	0	0	Thunderstorm Winds
	A t	elevision st	ation repor	rted winds	up to	62 m	ph.		_
Worcester County Ocean City	05	1855EST			0	0	0	0	Thunderstorm Winds
	Spo	otters at a fi	re station	reported w	inds g	gusting	g to 5	8 mph	•
Harford County Cecil County	09	1700EST			0	0	3	0	Thunderstorm Winds
	Tre	es were dov	wned in bo	oth countie	s. Po	wer o	utage	s affect	ted thousands in both counties.
City of Baltimore	09	1700EST- 1745EST			0	0	4	0	Thunderstorm Winds Lightning
	tree	enty-thousa s were dov se and dam	med elsew	here acros	ss. A ss nor	250-ye thern	ear-ol parts	d oak t of the	ree was partially knocked down, and city. Lightning started a fire in a
Baltimore County Towson	09	1800EST			1	0	2	0	Lightning
	A v \$2,	volunteer fin 500 damage	e fighter le to a state	ost his life -owned bu	fight ilding	ing a g. (M2	fire ca 80)	aused b	by lightning. The fire caused about
Cecil County Cherry Hill, Rising Sun, Elk Mills	10	1700EST			0	0	3	0	Thunderstorm Winds
	Tre	es were dov	vned in sc	attered area	as of a	all thre	e loc	ations.	In Elk Mills, a large tree fell onto
	pov	ver lines, ar	nd a few h	ouses suffe	ered r	oof da	mage	•	•

				<u> </u>	NO.	OF	ESTIN	MATED		JULY 1990
	6	LOCAL	LENGTH	UINTH	PER	OF SONS		AGE C		
PLACE	О 4 0-ш	STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	- Line	CHIBOC. 2.	а.асОа.шаэ->-	υσιουν	CHARACTER OF STORM	
MARYLAND and	i D	.C. Cont'	d							
City of Baltimore	10	1700EST			0	0	3	0	Thunderstorm W	inds
	Fif	teen-thousar	nd were le	ft without	powe	r due	to tree	s falli	ng onto power lines	•
Anne Arundel County Annapolis	y 10	1945EST			0	0	2	0	Lightning	
	Lig	htning struc	ck a parke	d car causi	ng ab	out \$	500 da	ımage.		
Montgomery County	11	1750EST			0	0	3	0	Thunderstorm W	inds
		unty police ver outages.		umerous p	ower	lines a	and tre	es dow	med. About 6,500 v	were affected by
Anne Arundel County Glen Burnie Brooklyn Park City of Baltimore		1800EST			0	0	4	0	Thunderstorm W	inds
	More than 2 inches of rain fell at Baltimore-Washington International Airport (BWI) with more than an inch elsewhere. The rains fell on saturated ground causing flooding of basements. Power lines were downed resulting in outages for 43,000 in Brooklyn Park and Glen Burnie. In the eastern part of Baltimore, several cars were caught in flooded low places, stranding their occupants and causing damage to the electrical systems of the cars.									
District of Columbia	12	evening			0	0	4	0	Thunderstorm W	inds
	Tw	enty-eight t	housand w	ere left po	werle	ess.				
Garrett County Allegany County Westemport	12 13	2100EST- 0700EST			0	0	4	0	Flooding	
	We	oding was sternport, a ndations da	carpet sto	it several re lost abo	locati out \$1	ons. 0,000	Three worth	e- to 5 of me	inches of rain wa erchandise. Several	s recorded. In homes had their
Saint Marys County	12	1950EST			0	0	0	0	Thunderstorm Wi Lightning	inds
	Co	unty police	reported to	rees and w	ires d	own.	Sever	ral tree	es were also on fire.	
Saint Marys County 1 E Lexington Park	14	0855EST- 0900EST			0	0	0	0	Waterspout	
	A v	waterspout f observer at	formed over Patuxent 1	r the Ches Naval Air	apeak Statio	e Bay n (Ni	just so IK).	outh of	f the Patuxent River.	. It was seen by
Caroline County Preston	14	1020EST- 1021EST	0.3	20	0	0	4	0	Tornado (F0)	
	A t	ornado part e path. Th	ially unro	ofed a deported about	artme it \$10	nt sto 0,000	re and dama	destro	yed an outbuilding	along a quarter-
Prince Georges			- /-					_		
County 1 NW Bowie Glenn Dale	14	1315EST			0	0	4	0	Thunderstorm W	inds

		TIME			NO.	OF SONS	EST II	MATED AGE		JULY 199
PLACE	DATE	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	Otto-CA	CHING CLE !		COCOTA	CHARACTER OF STORM	
MARYLAND an	d D	.C. Cont'	d							
	Tre Gle	es were up	rooted, blo a reported	ocking a n l a microbi	najor urst t	roady hat do	vay 1 :	mile no trees ar	orthwest of Bowie. Spotte	ers in th
Washington County Hancock Hagerstown 1-2 S Hagerstown Allegany County Westernport, Luke	15	1400EST- 1830EST			0	0	4	0	Flooding	
	Ha	gerstown, ir	ı Washing	ton County	/; als	o in V	Vesterr	iport ar	gerstown, and 1 to 2 miles ad Luke in Alleghany Cour ag of July 12th were hit ag	nty. Th
Kent County Chestertown	17	Evening			0	0	0	0	Thunderstorm Winds	
	Tre	es and pow	er lines we	ere downed	1.					
Howard County Anne Arundel County	21	1400EST- 1430EST			0	0	3	0	Thunderstorm Winds	
	to a	wer company about 8,700 Howard Cou	customers	in Annapo	olis au	and li nd Gle	ightnin en Buri	g from	a thunderstorm knocked of anne Arundel County. A s	ut powe mall pa
Harford County Bel Air	22	1330EST			0	0	4	0	Lightning	
	Lig	htning caus	ed about \$	50,000 da	mage	to an	aparti	ment co	omplex.	
MASSACHUSET	TS									
Berkshire County	05	0225EST			0	0	3	0	Thunderstorm Winds (G50KTS)	
	Thu in V	understorm v Williamstow	winds gust n and Nor	ed to an es	timat Sca	ed 60 ittered	mph is powe	n Adam r outag	ns. A few trees were report es occurred.	ted dow
Franklin County Heath	05	0230EST			0	0	3	0	Lightning	

Lightning Heath 05 0230EST A barn was struck by lightning and totally destroyed by the resulting fire. Franklin County Shelbourne Thunderstorm Winds 20 1706EST Worcester County Templeton ? 20 1740EST 0 Thunderstorm Winds A severe thunderstorm skipped through portions of Franklin and Worcester counties knocking down some trees, causing power outages, and an unknown amount of property damage.

Bristol, Plymouth Counties

0700EST-1400EST 5 Flash Flood

An area of very slow-moving thunderstorms dropped torrential rain in an area stretching from near Fall River northward to Taunton, Middleboro, and Bridgewater and then east-northeastward

JULY 1990

		TIME			NO. PER	OF SONS	ESTII DAM/	MATED AGE	
PLACE	Đ	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	P C	CHING C. E.		OBC DEC	CHARACTER OF STORM

MASSACHUSETTS Cont'd

to the Duxbury, Kingston, and Plymouth area. Rainfall amounts of 4 to 7.50 inches were reported during a 4- to 6-hour period. The maximum rainfall amounts were recorded in the Middleboro area. Numerous low-lying, flood-prone areas quickly filled with several feet of water. Many motorists were stranded when their parked autos became partially submerged by the flood waters. Officials were forced to close many roads due to the flooding. Many residents and businesses reported flooding of basements and cellars.

Bristol, Plymouth, Barnstable Counties

24 0700EST-1500EST

0 0 5 0 Lightning

Thunderstorms which brought downpours of rain to portions of Bristol and Plymouth counties also caused numerous and damaging lightning strikes. In Middleboro, lightning struck and split the steeple of the Congregational Church. Lightning struck homes from Brockton to Plymouth to New Bedford and Taunton. Some lightning strikes caused fires which resulted in mostly minor damage. A shed was totally destroyed in Lakeville. Power outages affected up to 50,000 electric customers in Plymouth and Bristol counties. In Barnstable County, lightning struck a main feeder line in Sandwich about 1500 EST knocking out power to all of Cape Cod and Martha's Vineyard leaving 160,000 electric customers without power for up to 2 hours.

MAZ007

25 0200EST-1400EST

0 0 4 0 Heavy Rain

Slow-moving thunderstorms brought downpours of rain to communities north of Boston. Three to 5 inches of rain fell during a period of up to 12 hours, resulting in considerable flooding of low-lying areas in Peabody, Lynnfield, Lynn, Wakefield, Beverly, and Salem. Many roads and underpasses were inundated by flooding. Some residents reported basement flooding.

MICHIGAN

	04	1900EST	0	0	0	0	Hail (0.75)
Muskegon County 10 NNE Muskegon	04	1915EST	0	0	0	0	Hail (1.00)
Kent County Alpine	04	2000EST	0	0	0	0	Thunderstorm Winds (G55)
Kent County Alpine	04	2000EST	0	0	0	0	Hail (0.88)
Muskegon County Fruitport	04	2000EST	0	0	0	0	Hail (1.75)

A series of thunderstorms moved over southwestern lower Michigan during the evening of July 4th. These storms were ahead of a cold front that ended the hottest day of the year for that area. It also forced the delay of the Grand Rapids 4th of July Fireworks Display until the next day, July 5th.

Antrim County 1 SE Elk Lake to 3 SW of Bellaire

08 1930EST-1950EST 12.0 30 0 0 0 Tornado (F1)

The tornado first touched down over Elk Lake, then moved northeast, touching down several times as it passed over Torch Lake and Clam Lake. The tornado dissipated as it moved on shore after passing over Clam Lake. The tornado was on the ground about 30% of the time and most of that was over water. No damage was noted from this tornado.

Ingham City of Lansing

15 1815EST

0 0 2 0 Lightning

Lightning struck the chimney of Clara's Restaurant in downtown Lansing. This caused the chimney to explode. That caused \$1,000 damage to the building and frightened most of the patrons of the restaurant out of the building for a short time.

JULY 1990

		TIME			NO.	SONS	EST IN	AATED AGE	
PLACE	D40-E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K-L-L	CHICACLE	4-00m00x0	COCOCO.	CHARACTER OF STORM

MICHIGAN Cont'd

Cass County
Barron Lake to
Calvin Center

16 1919EST-1945EST 12.0 50 0 0 3 0 Tornado (F1)

This tornado had many sightings. The first was near Barron Lake where it blew 3 pontoon boats on shore 40 feet and caused some damage to a few tree limbs. The storm interrupted the Cass County Fair for a short time but did not cause any damage to the fairgrounds. The tornado was on the ground 40% of the time but after the damage to the pontoon boats, the only other damage was downed trees and broken tree limbs.

Cass County Cassopolis	16	1930EST	0	0	0	0	Hail (1.00)
Eaton County Potterville Ingham County	16	2050EST	0	0	0	0	Hail (1.75)
Williamston Calhoun County	16	2145EST	0	0	0	0	Hail (1.75)
1 W Beadle Lake	16	2245EST	0	0	0	0	Thunderstorm Winds

Many trees were blown down west of Beadle Lake.

Ottawa County Park Township

17 0030EST 0 0 4 0 Lightning

Lightning struck a Park Township home causing a fire that was not discovered until 0845 EST when a passer-by noticed the fire. By the time the firemen came and put the fire out, \$25,000 damage was done to the home and #15,000 to the family car and boat.

Cheboygan County Black Lake

17 1330EST 0 0 3 0 Thunderstorm Winds

A severe thunderstorm with very strong winds caused considerable damage on both sides of Black Lake. One hundred trees were sheared off near their bases. Quite a few pontoon boats were blown out of the water or smashed on docks or nearby trees. In fact, some docks were torn from their moorings by the storm. Residents say the storm was rather brief, but quite intense. Several funnel clouds were seen during the storm, but none were seen touching the ground.

Clinton County
Maple Rapids
Genesse County
Montrose
Genesee County
1 S Flint's Bishop
Airport

18	1530EST	4		0	0	0	0	Thunderstorm Winds
18	1555EST			0	0	0	0	Hail (0.75)
18	1615EST	3.0	30	0	0	0	0	Tornado (F0)

A tornado was spotted by the National Weather Service duty observer. The tornado moved eastward about 1 mile south of the airport and was seen from 1615 EST until 1623 EST before it became obscured by rain. No damage was reported with this tornado.

Genesee County
1 S Goodrich

18 1615EST 1.0 50 0 0 3 0 Tornado (F1)

A 100-year-old home was pushed 1 foot off its foundation by another tornado that was seen by the building owner about the same time as the Bishop Airport tornado. This is about 8 miles southeast of the airport.

Genesee County Fenton

18 1630EST 0 0 0 Thunderstorm Winds

Several trees were blown down.

JULY 1990

		TIME			NO. PER	OF SONS	EST II	AATED AGE	
PLACE	D E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	C T T T T T T T T T T T T T T T T T T T	CHING(-E-		COCODO	CHARACTER OF STORM

MICHIGAN Cont'd

Genesee County Gilkey Creek Flint

18 1730EST-1830EST

3 0 0 0 Flash Flood

Two brothers and a friend drowned when they were trapped in a drain during very heavy rain. Flint Airport recorded around 0.50 inch of rain during this storm; however, the television station in downtown Flint, closer to the location of the drowning, reported 0.80 inch in 20 minutes. (M170, M170, M130)

Genesee County City of Flint

18 1735EST

0 0 3 0 Lightning

A commercial building was damaged by a lightning strike.

Huron County Eikton

19 1430EST

0 0 3 0 Lightning

Lightning struck a residential home while the family was away. The mostly wooden home was nearly a total loss.

Kent County Grand Rapids

19 1715EST-1845EST

0 0 4 0 Flash Flood

Very heavy rains, 2.33 inches near the Cascade Township City Hall. The City Manager noted, "This was the second most intense storm in 75 years." Most downtown streets were flooded. This caused many people to abandon their automobiles. Many basements were flooded, with considerable damage. The city sewer system could not handle this, so some of the untreated sewage overflowed into the Grand River. This resulted in a health advisory being issued for the area for the following two days.

MINNESOTA

Ottertail County 1.5 N Hillview

02 Morning

0 0 4 0 Lightning

Fire due to a lightning strike totally destroyed a barn.

Rosseau County Rosseau

02 2210CST

0 0 ?

Thunderstorm Winds (G52)

Rice County Wabasha County Goodhue County Olmsted County Dodge County

07 0400CST-1400CST

1 0 6 ? Flash Flood

?

Excessive rains in the 4- to 10-inch range inundated a good portion of southeastern Minnesota. Early Saturday morning rains caused the closing of Highway 52 separating Pine Island and Zumbrota. The rampant waters quickly overtook Pine Island where the city became a second course for the Zumbro River. Numerous basements were filled by flood waters, collapsing basement walls. The swift waters also washed away a retaining wall to the rear of a motel in Pine Island. A male motorist was drowned when his car was swept away as he attempted to negotiate flood waters while traveling south on Wabasha County Highway 1, 5.5 miles south of Mezeppa. Campgrounds in the area were evacuated. Prior to the evacuation one camper class vehicle was swept away by the rushing waters. Luckily there were no deaths or injuries. Many county roads remained closed into the early afternoon due to waters 3- to 5-feet in depth, in some areas flowing across roadways. Most of the counties mentioned reported many sites within their counties that had suffered bridge deck and support structural damage. Some of the worst was in the Oronoco area. (M?)

JULY 1990

		TIME			NO. PER	OF SONS	EST II	MATED AGE	
PLACE	D	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	Ser - A	CHISOCLE.	4-0mm00x00	NACORU	CHARACTER OF STORM

MINNESOTA Cont'd													
McLeod County Winsted	07 0430CST	0	0	6	0	Lightning							
	Fire resulting from a lightning strik	e cau	ised da	amage	in exc	ess of \$750,000 to a horse stable.							
Hennepin County Orono	07 0500CST	0	0	4	0	Lightning							
	Lightning-initiated fire caused home	Lightning-initiated fire caused home property damage.											
Dakota County Burnsville	07 0557CST	0	0	4	0	Lightning							
	Lightning-initiated fire caused home	e pro	perty o	damag	e.								
Becker County Cormorant	07 1600CST	0	0	?	?	Hail (1.75)							
Central Cass County	07 1740CST	0	0	?	?	Hail (1.75)							
Hubbard County Park Rapids	07 1748CST	0	0	?	?	Hail (1.75)							
Douglas County Alexandria	08 0050CST	0	0	5	?	Thunderstorm Winds (G52)							
	There were numerous reports of do	wned	trees	and pr	roperty	damage.							
Lincoln County Tyler	08 0115CST	0	0	4	?	Thunderstorm Winds							
	There were scattered reports of dow	vned	trees.										
Pipestone County Pipestone	08 0125CST	0	0	5	?	Thunderstorm Winds							
	There were scattered reports of dov There was roof and facade damage	wned to he	trees mes a	and a nd bus	few re	eports of isolated property damage.							
Lyon County Balaton	08 0130CST	0	0	4	?	Thunderstorm Winds							
	There were scattered reports of tree	and	proper	rty dar	nage.								
Mille Lac County 3 SE Milaca	08 0145CST	0	0	4	?	Thunderstorm Winds							
	There were 22 trees uprooted in a narrow path (width of 50 yards and 0.50 to 0.75 mile long) extending in a northeastern direction. All trees were downed in the same general direction. A nearby steel shed was twisted off its support. The steel roof of a corn crib was torn off. Several other small farm structures suffered some damage.												
Northern Murray County	08 0200CST	0	0	?	?	Thunderstorm Winds (G52)							
	Scattered trees were downed with re Some damage was reported by farm property damage occurred in the Sla	eports ers to ayton	of mi their and I	inor pi cash c ake W	roperty rops, i Vilson	damage to several farm structures, mainly corn. Most of this crop and areas.							

77

		r			T		T			JULY 1990
		TIME			PER	SONS		MATED AGE		
PLACE	D E	LOCAL STANDARD	LENGTH OF PATH (MILES)	PATH (YARDS)	K-1-40	OTTOR CL.		COCO	CHARACTER OF STORM	
AMPHECOTA C	43	1		•	<u> </u>					•
MINNESOTA CO	ont	d								
Lyon County Tracy	80	0230CST			0	0	?	0	Thunderstorm W	inds
	Sca and	ittered trees I boat docks	were down	ned and a returned on	eport area	of tw	o barn	s colla	psed by strong wind	s. Several boats
Yellow Medicine										
County 10 S Canby	08	0300CST			0	0	5	0	Thunderstorm W	inds
	upr mil	ong thunder ooting trees es south of ed a barn fr	s, and dow Canby to	ning powe near Porte	possil r pole r, des	ble to es. T stroyii	ornado he swa ng seve	destro th of o eral ot	oyed two barns, kil damage extended no her small outbuildin	ling four cattle, ortheast, from 10 legs. Winds also
Redwood County Walnut Grove	08	0305CST			0	.0	4	?	Thunderstorm W	inds
	Sev	eral trees w	vere downe	ed and two	barn	s coll	apsed 1	by stro	ong thunderstorm wi	inds.
Northeastern Sibley County	08	0345CST			0	0	5	?	Thunderstorm W	inds (G61)
	to o	ong thunder outbuildings townships	, power li	nes, and do	ownec	l num	Sibley erous	Countrees.	ty causing consideral The heaviest damag	ble wind damage se was located in
Southeastern Carver County	08	0350CST			0	0	5	?	Thunderstorm W	inds (G52)
	Thu free dan	understorm e and small nage ran alc	winds caus sheds bein ong a line	sed scattere ig toppled. from Your	d pro Sca g An	perty ttered nerica	damag areas to Ch	ge; mos also re anhass	stly in the form of re eported trees being t en.	oof shingles torn uprooted. Most
Southern Hennepin County	08	0405CST			0	0	5	?	Thunderstorm W	inds (G61)
	The	e Minneapo	lis Police	Departmen	it rec	eived	over :	350 re	There was widespre ports of downed trops to as long as 72 h	ees. More than
Northern Ramsey County	08	0415CST			0	0	5	?	Thunderstorm W	inds (G54)
	The	ere was scat	tered prop	erty damag	ge and	l num	nerous	trees v	vere downed.	
Northern Washington County	08	0420CST			0	0	4	?	Thunderstorm W	inds
	The	ere were wi	dely scatte	red reports	of d	owne	d trees	causir	ng power outages.	
Watonwan County Martin County	11	1709CST	10	10	0	0	0	0	Tornado (F0)	
	A s into	small tornad Martin Co miles north	o first touc unty, with of Fairmo	ched down touchdow ont at 1740	south ns rep CST	neast o ported	of St I about	James 5 mil	near South Branch a es west of Truman a	and then skipped at 1734 CST and

0 0 0 0 Funnel

Stearns County St. Cloud

11 1900CST

		1	Γ	Γ	LNO	OF	ECTIV	ATED	JULY 1990
		TIME			PER	SONS	EST IM DAMA		
PLACE	DAOLE	STANDARD	LENGTH PATH (MILES)	WIDTH OF PATH (YARDS)	0.1.1.6	CHICACLES-		CACOTA	CHARACTER OF STORM
MINNESOTA C	ont'	d							
Watonwan County Darfur	16	1721CST			0	0	0	0	Funnel
East Darfur	16	1725CST			0	0	?	?	Hail (1.75)
	Tw	o-hundred a	cres of co	rn and soy	beans	were	e severe	ely dai	maged.
Steele County Blooming Prairie	16	2329CST			0	0	?	0	Lightning
	A١	barn was str	uck by lig	htning and	dest	royed	by the	result	ing fire.
Brown County New Ulm	17	0045CST			0	0	?	?	Thunderstorm Winds
	There were scattered reports of downed trees and some wine								damage to homes and outbuildings
Olmsted County Rochester	17	17 0130CST				0	4	0	Lightning
	A 1	house fire w	as started	by lightni	ng.				
McLeod County Glenco	17	0250CST			0	0	5	4	Thunderstorm Winds Hail (1.75)
	The	ere was cons wned trees a	siderable d ind power	amage to c lines in th	orn a e area	nd so	ybean o	crops t	by the wind-driven hail. Winds also
Benton County Rice 15 NE St. Cloud	17 17	0250CST 0255CST			0	0	?	?	Hail (1.00) Hail (0.75)
Crow Wing County 4 SW Brainerd	17	0305CST			0	0	?	?	Thunderstorm Winds (G56)
Hennepin County Minneapolis	17	0320CST			0	0	?	?	Thunderstorm Winds (G52) Hail (1.00)
Anoka County Fridley Elk River	17 17	0325CST 0325CST			0	0	?	?	Hail (0.75) Lightning
	A 1	barn struck	by lightnir	ng resulted	in co	nside	rable f	ire dar	nage.
Aitkin County Aitkin Ramsey County	17	0330CST			0	0	?	?	Hail (0.75)
Falcon Heights	17	0335CST			0	0	?	?	Thunderstorm Winds
	Tre	es and pow	er lines wo	ere downe	d.				
Crow Wing County Bay Lake	17	0355CST			0	0	?	?	Hail (1.00)

A combination of strong thunderstorm winds and hail devastated several farms. Several trees were uprooted. Some farms in the area suffered up to 85% damage to the small grain crops. The damage swath was about 2 miles wide and 7 miles long.

?

?

Thunderstorm Winds Hail

Lincoln County 6 N Ivanhoe

18 0430CST

		TIME			NO.	OF SONS	ESTI	AATED	JULY 1990			
	0	LOCAL	LENGTH	WIDTH	K	I						
PLACE	Ě	STANDARD	PATH (MILES)	WIDTH OF PATH (YARDS)	O D	N-)Docuso		ORODO	CHARACTER OF STORM			
MINNESOTA Co	ont'	d	-									
Western Lincoln County	18	1537CST			0	0	?	?	Thunderstorm Winds			
	The	ere were rep	orts of lar	ge trees de	owne	d 35 r	niles v	vest-sor	uthwest of Marshall.			
Watonwan County 5-10 NW St. James	: 18	1758CST			0	0	?	?	Thunderstorm Winds (G52)			
	The	e highway p	atrol repo	rted winds	to 60) mph	•					
Martin County Fairmont	18	2000CST			0	0	?	?	Flash Flood			
	lov	w-moving the code spital which	ing in and	around Fa	irmo	nt. M	amoun any ba	ts of 2. isemen	50 to 3.50 inches causing street and ts were flooded, including the local			
Lincoln County Ivanhoe	18	2115CST			0	0	?	0	Lightning			
	A lake home was destroyed by fire after being struck by lightning.											
Lincoln County Ivanhoe	18	2130CST			0	0	?	?	Thunderstorm Winds Hail			
	bui	understorm ldings were corn and soy	damaged	and a barr	dama was	age to comp	sever letely	al farm destro	ns north of Ivanhoe. Several farm yed. Hail caused scattered damage			
Rice County Faribault	18	2345CST			0	0	?	?	Lightning			
	Lig	htning knoo	ked out p	ower to ab	out o	ne-hal	f of th	e city.				
Brown County New Ulm	24	2340CST			0	2	3	0	Thunderstorm Winds (G56) Lightning			
	son	nds toppled were struc ctrical shock	k by light	ning while	stan	ding i	n their	e to a h r garag	nome. A father and his 10-year-old te. Both were knocked out by the			
Winona County Altura	25	0215CST			0	0	?	?	Thunderstorm Winds			
	Sev	eral downed	d trees and	numerous	s snap	ped to	ree lim	bs litte	ered many yards.			
Pipestone County Pipestone	25	1100CST			0	0	3	?	Thunderstorm Winds			
	Tw Hig the	o to 3 inche ghway 30. A rapidly risi	s of rain fo At one such ng waters	ell in about n point a 1' when his v	t 20 n 7-yea vehicl	ninute r-old e e beca	s causi driver ame sta	ng flas had to alled.	h floed conditions along Minnesota crawl out of a car window to escape			
Wright County 5 NW Rockford	25	1429CST	0.1	10	0	0	0	0	Tornado (F0)			

Storms produced a small tornado which briefly touched down in an open field. Two funnel clouds were also reported northwest of Rockford.

		TIME			NO.	OF SONS	EST!	MATED AGE	JULY 1990
PLACE	D A E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K	-2-700m0		COCOLA	CHARACTER OF Storm
MINNESOTA CO	ont'o	d							
Benton County 3 NE Gilman	25	1615CST			0	0	3	. 0	Lightning
	Fire	e damage to	a barn ca	used \$30,0	000 da	amage	€.		
Yellow Medicine									
County Woodlake	26	2030CST			0	0	?	?	Thunderstorm Winds
	Stre	ong winds t siderable d	oppled a bamage to t	arn west o	of Wo	odlak	e. W	ind-driv	ven rains and small hail also caused
Isanti County Cambridge	26	0830CST			0	0	5	. 0	Lightning
-			ower was	struck by	lightn				of \$80,000 to \$120,000.
Redwood Falls									·
County Redwood Falls	26	0300CST- 0630CST			0	0	?	?	Flash Flood
	Stre	eets and ba	sements wad to be ev	ere floode acuated du	d due	e to e	early r sing w	norning	g rains of 4 to 6 inches. A local
Brown County Renville County McLeod County Blue Earth County Nicollet County	27	2000CST 2400CST			0	0	?	6	Flash Flood
	wer seg ove coll wer for Bro	re recorded ments in an are western lapsing under reports of a time as wown County!	in a 1 to d around 1 Renville (er the water widespreaters up to alone was Excessive	2 hour du New Ulm. County. I or pressure. ad sewer, l of 5-feet dee estimated rains also	Ther Soth In the nome, p force at \$64	n. The were areas ne Glocand of the control of the	hese to re som repor encoe : crop d uests o 0. Are stretch	orrential e unoff ted ma and Pla amage. ut of the eas hard es of S	totals ranged from 3 to 6 inches and all rains caused the collapse of road incial reports of 6 to 8 inches of rain any flooded basements with a few ato areas, north of Silver Lake, there A motel in Glencoe was evacuated neir rooms. Crop damage in eastern dest hit were New Ulm, Sleepy Eye, tate Highway 68 west of Manka to ering the road from ditch to ditch.
Le Sueur County New Prague	27	2230CST			0	0	?	?	Flash Flood
	Up	to 2 feet of	f water wa	s reported	over	the ro	oad ab	out 0.5	mile south of New Prague.
Fillmore County Houston County	28	0045CST			0	0	?	?	Flash Flood
	Rai	nfall of 3 to	o 4 inches	caused flo	oding	in th	e Pete	rson ar	nd Rushford areas.
Koochiching County 5 E International Falls		1533CST			0	0	5	0	Thunderstorm Winds
	Ştre		storm win	ds toppled	trees	and c	overtu		ree float planes sustaining \$300,000

0

Funnel

Cottonwood County
1 N Bingham Lake 28 1635CST

JULY 1990

		TIME			NO. PER	OF SONS	EST II	MATED AGE	
PLACE	D	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K		P 200 1120-7	COCCO	CHARACTER OF Storm

MINNESOTA Cont'd Sibley County 2 S Gaylord ? 28 1655CST 0 **Funnels** Several funnel clouds were sighted west and south of Gaylord. **Dakota County** Eagan 1700CST-2000CST Flash Flood At approximately 1700 CST and ending 60 to 90 minutes later, 4 to 6 inches of rain pounded portions of the city of Eagan. One unofficial report reflected a 5 inch rainfall in 15 to 30 minutes. The result was considerable street flooding and in some areas waters rose rapidly to car top level at some underpasses. Some roads were temporarily closed until waters receded later that evening. The resulting street flooding stranded many motorists and washed out some power poles. Parts of the city were without power for a time. Brown County New Ulm 28 1925CST Thunderstorm Winds (G52) There were scattered reports of downed trees. Goodhue County 28 1825CST 0 Flash Flood Torrential rains caused flash flooding in extreme northern Goodhue County. Several homes along a normally dry creek were cut off from the access road by high water. The road from Prairie Island to the Dakota County line was under water for a time. An area farmer reported 3 inches of rain falling in a 45-minute time frame. 7 **Houston County** 28 2145CST 0 ? Flash Flood The Houston County Sheriff reported 3 inches of rain at the Beaver Creek State Park and a resulting mud slide on Highway 76 between Houston and Caledonia. Street flooding was also reported in the city of Houston. MISSISSIPPI Noxubee County 2 W Brooksville 02 1435CST ? 14 Macon Thunderstorm Winds Several trees were blown down at both locations. Winston County 02 1507CST 2 E Louisville Thunderstorm Winds

Several trees were blown down. One of the trees fell on a tractor-semitrailer.

Neshoba County Philadelphia

02 1600CST

0 8 6 0 Thunderstorm Winds

Nineteen single-family homes received major damage, 69 with minor damage. Three mobile homes were destroyed; two received major damage, and four minor damage. Four apartment units, two industries, and thirty-nine businesses were damaged. A hospital had the roof blown off and numerous trees were blown down. Total damage estimates were placed at \$800,000.

Newton County 3 W Union

02 1630CST

0 0 3 0 Thunderstorm Winds

Numerous trees were blown down. Tin was blown off the roofs of several buildings and many television antennas were blown down.

	·	TIME		<u> </u>	NO.	OF SONS	EŞŢĮ	MATED		JULY 1990
	D	LOCAL	LENGTH	 ₩IDTH	K	I				
PLACE	DAO-E	STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	CHILL	A JORGEO	<u>РесОршес−</u> ≻	CacOau	CHARACTER OF STORM	
MINNESOTA Co	nt'o	i								
Leake County	02	1650CST			0	0	?	0	Thunderstorm Wind	ls
•	Sev	eral trees w	ere blown	down in	both 1	Edinb	urg an	d Cartl	nage.	
Scott County	00	1015000			•	•		•		•
2 NE Forrest					0.	0	?	0	Thunderstorm Wind	
	Αl	arge pecan i	iree had se	veral large	limb	s brol	ken of	by hig	th winds estimated at 5	00 to 60 mph.
Madison County 3 E Ridgeland	02	1755CST			0	0	?	0	Thunderstorm Wind	ls
:	Tw	o trees were	e blown do	wn.						
Hinds County NE Jackson	02	1755CST			0	0	?	?	Hail (1.75)	
Rankin County 3 NE Luckney	02	1755CST			0	0	4	0	Thunderstorm Wind	ls
	Sev	eral of the	trees tell c	n houses.	One	tree :	tell on	a trail	ea south of Ross Barne er and trapped a man i blown down. A large f eworks blown over the	nside, but he
Madison County Ridgeland	02	1800CST			0	0	4	0	Thunderstorm Wind	ls
	Nu: The	merous treesere was roof	s were blo f damage t	wn down. o a lumbe	A co	untles	s num a tarpa	ber of l	large limbs were blowr as damaged at a garde	n out of trees. n nursery.
Hinds County 5 NE Jackson	02	1800CST			0	0	5	0	Thunderstorm Wind	ls
	a la	arge tree. T	wo house	s suffered	roof	dama	ge due	to fall	ouse suffered major daing trees. A steeple was bricks and shingles belown down.	vas blown off
Hinds County 6 SW Jackson Leflore County		1800CST			0	0	0	0	Thunderstorm Wind	ls (G64)
Greenwood Airport GWO	02	1810CST			0	0	5	0	Thunderstorm Wind	ls (G70)
	Sev aire	eral buildir eraft was als	ngs were o	lamaged a d.	nd a	hang	ar und	ler con	struction was destroye	ed. A DC-3
Leflore County Greenwood	02	1812CST			0	0	4	0	Thunderstorm Wind	ls ·
	Sev	eral trees w	ere blown	down and	l a sn	nall tr	ailer w	as blo	wn off its blocks.	
Hinds County 2 SW Jackson	02	1815CST			.0	0	5	0	Thunderstorm Wind	ls
	Th	ree building	s had exte	nsive roof	dama	ige ar	ound I	Ellis A	venue and Interstate 20). _.
Leflore County Greenwood	02	1825CST			0	0	?	0	Thunderstorm Wind	ls

Several trees were blown down.

	Т	TIME			No.	OF SONS	EŞŢĮ	MATED AGE		JULY 1990
	Q	LOCAL	LENGTH	нтдуш	K	T ₁		· · · · · · · · · · · · · · · · · · ·	CHARACTER	
PLACE	D A	STANDARD	PATH	WIDTH OF PATH		Ŋ	B	COOD	CHARACTER OF STORM	
		į į	(MILES)	(YARDS)	Ē	CHESC	4-com0000	5		
		<u> </u>		<u> </u>	<u></u>	<u> </u>	<u> </u>			
MINNESOTA C	ont'	d								
Lawrence County Monticello and										
Silver Creek	02	1830CST			0	0	0	0	Hail (0.75)	
Lincoln County Brookhaven	02	1930CST			0	0	?	0	Thunderstorm Winds Lightning	
	Nu An	merous tree nount of dar	s and pow nage from	er lines w the lightn	ere b ing w	lown as un	down. known	Seve	eral fires were started by	y lightning.
Pike County 5 NW Mccomb	02	2030CST			0	0	?	0	Thunderstorm Winds	
	Sev	eral trees w	ere blown	down acr	oss H	ighwa	ay 98.			
Claiborne County		2110.00		÷	•	•		•	TT 10 (4 55)	
2 W Port Gibson	02	2110CST			0	0	?	0	Hail (1.75)	
Neshoba County Philadelphia	08	1930CST	•		0	0	?	0	Thunderstorm Winds	
	Sev	veral trees a	nd power l	lines were	blow	n dow	vn.			
Lauderdale County 12 N Meridian	11	1755CST			0	0	?	0	Thunderstorm Winds	
	Sev		ere blown	down ont	o pov	-			ocked out electrical serv	ice to parts
Sunflower County Ruleville	13	1310CST			0	0	4	0	Thursdowntown Windo	
Kuieviiie	_	roof was b	olova off (he Head S	_	0 ildir	•	U	Thunderstorm Winds	
Sunflower County	1116	o 1001 was t	nown on t	ile Head S	tait o	dildii	ıg.	•		
Drew	20	1515CST			0	1	0	0	Lightning	
	Αg	girl was stru	ck by ligh	tning whil	e put	ting u	p a ch	ain lin	k fence. She was burne	d badly.
Marshall County Mt. Pleasant	22	1915CST			0	0	?	0	Thunderstorm Winds	
	A f	ew trees we	re blown	down.						
Benton County Lamar	22	1915CST			0	0	?	0	Thunderstorm Winds	
	A f	ew trees we	re blown	down.						
Grenada County	22	1937CST	a.		0	0	?	0	Thunderstorm Winds	
	Nu	merous trees	s were dov	vn across s	outhe	ern G	renada	Count	y.	
Madison County Canton	23	1110CST			0	Ö	?	0	Thunderstorm Winds	
	Nu	merous pow	er lines w	ere blown	down	١.				
Kemper County Scooba	23	1215CST			0	0	?	0	Thunderstorm Winds	

Several trees were blown down onto power lines.

JULY 1990

		TIME			NO. PER:	OF SONS	EST IN	ATED GE		3021 1990
PLACE	Đ	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH PATH (YARDS)	K) LLED	— 3. 20000		CECOLIN	CHARACTER OF STORM	
MINNESOTA CO	ont'	d								
Warren County	23	1625CST			0	0	?	0	Thunderstorm Wi	inds
	Do por	zens of tree wer lines an	s were repo	orted down is trees we	acro re rep	ss sou	uthern down	Warre in yar	n County. Six of th	e trees fell onto
Jasper County	23	1715CST			0	0	?	0	Thunderstorm Wi	inds
	Nu	merous tree	s were blo	wn down i	in sou	thern	Jaspe	r Coun	ity.	
Clarke County 2 S Pachuta	23	1735CST			0	0	?	0	Thunderstorm Wi	inds
	Sev	veral trees w	vere blown	down.						
Clarke County 3 S Stonewall	23	1825CST			0	0	?	0	Thunderstorm W	inds
	Sev	veral trees w	vere blown	down. O	ne tre	e wa	s block	ting a	state road.	
Lee County Nettleton	30	1330CST			0 ~	0	?	0	Thunderstorm Wi	inds
	Sev	veral power	lines and l	large limbs	were	blov	vn dov	vn.		
Winston County 5 NW Louisville	30	1518CST			0	0	0	0	Hail (0.75)	·
Lee County 4 N Tupelo	31	1320CST			0	0	4	0	Thunderstorm Wi	inds (G52)
	A	carport was	destroyed	and a mall	had	mino	r struc	tural d	amage.	
Rankin County Star	31	1500CST		,	0	0	?	0	Hail (1.75)	
Yallobusha County 2 E Enid	31	1515CST			1	0	0	0	Lightning	·
	A o	63-year-old dy. He was	man had h killed ins	nis foot on tantly. (Mo	a tre 530)	e who	en ligh	tning s	struck the tree and t	raveled into his
Hinds County 3 W Jackson Hinds County	31	1528CST			0	0	0	0	Hail (0.75)	
3 SW Jackson	31	1610CST			0	0	?	0	Thunderstorm Wi	inds (G60)
•	Tw	o trees were	e blown do	own.						

Wind to 58 mph.

10 0650CST

11 2338CST

Limbs and power lines were blown down.

MISSOURI

Andrew County 17 W King City

Boone County 12 S Columbia 2

0

2

Thunderstorm Winds

Thunderstorm Winds

JULY 1990

MISSOURI Cont'd Boone County 12 S Columbia			TIME			NO.	OF SONS	EST IN	MATED NGE	JULY 1990
Boone County 12 1815CST 0 0 0 0 0 0 0 0 0	PLACE	D	1	PÄTH	1	K		~-compOx0	UMDO.W	CHARACTER OF Storm
One inch of rain fell in 15 minutes. Clay County 1 E Liberty 25 2030CST 0 0 0 3 0 Thunderstorm Winds Large tree limbs were blown down. Platte County MCI WSO 28 0447CST 0 0 0 0 Thunderstorm Winds Wind gusted to 59 mph at the National Weather Service Office. Benton County 3 E Warsaw 28 1900CST 0 0 4 3 Thunderstorm Winds Trees were uprooted. Dunklin County Kennett 29 1700CST 1 0 0 0 Lightning A 19-year-old man was killed when struck by lightning. Lightning evidently hit a nearby oak tree. (M19?) MONTANA Garfield County Jordan MCCone County 10 NE Vida Yellowstone County 10 NE Vida Yellowstone County Billings 01 2240MDT 0 0 0 3 4 Thunderstorm Winds (G52) Powell County 10 12040MDT 0 0 0 3 4 Thunderstorm Winds (G52)	MISSOURI Cont	'd								
Clay County 1 E Liberty 2 25 2030CST 0 0 0 3 0 Thunderstorm Winds Large tree limbs were blown down. Platte County MCI WSO 28 0447CST 0 0 0 0 Thunderstorm Winds Wind gusted to 59 mph at the National Weather Service Office. Benton County 3 E Warsaw 28 1900CST 0 0 4 3 Thunderstorm Winds Trees were uprooted. Dunklin County Kennett 29 1700CST 1 0 0 0 Lightning A 19-year-old man was killed when struck by lightning. Lightning evidently hit a nearby oak tree. (M19?) MONTANA Garfield County Jordan MCOrde County 10 NE Vida Yellowstone County 10 NE Vida Yellowstone County Billings 10 21500MDT 0 0 0 3 4 Thunderstorm Winds (G52) Thunderstorm Winds (G52) Thunderstorm Winds (G52)	Boone County 12 S Columbia	21	1815CST			0	0	0	0	Heavy Rain
Large tree limbs were blown down. Platte County MCI WSO 28 0447CST 0 0 0 Thunderstorm Winds Wind gusted to 59 mph at the National Weather Service Office. Benton County 3 E Warsaw 28 1900CST 0 0 4 3 Thunderstorm Winds Trees were uprooted. Dunklin County Kennett 29 1700CST 1 0 0 0 Lightning A 19-year-old man was killed when struck by lightning. Lightning evidently hit a nearby oak tree. (M19?) MONTANA Garfield County Jordan McCone County 10 NE Vida Yellowstone County Billings 01 2040MDT 0 0 0 2 0 Thunderstorm Winds (G61) Thunderstorm Winds (G52) Thunderstorm Winds (G52) Thunderstorm Winds (G52) Thunderstorm Winds (G52)		On	e inch of ra	in fell in 1	5 minutes					
Platte County MCI WSO 28 0447CST 0 0 0 0 Thunderstorm Winds Wind gusted to 59 mph at the National Weather Service Office. Benton County 3 E Warsaw 28 1900CST 0 0 4 3 Thunderstorm Winds Trees were uprooted. Dunklin County Kennett 29 1700CST 1 0 0 0 Lightning A 19-year-old man was killed when struck by lightning. Lightning evidently hit a nearby oak tree. (M19?) MONTANA Garfield County Jordan McCone County 10 NE Vida Yellowstone County Billings 01 2240MDT 0 0 0 3 4 Thunderstorm Winds (G52) Thunderstorm Winds (G52) Thunderstorm Winds (G52) Thunderstorm Winds (G52) Thunderstorm Winds (G52)	Clay County 1 E Liberty	25	2030CST			0	0	3	0	Thunderstorm Winds
MCI WSO 28 0447CST 0 0 0 0 Thunderstorm Winds Wind gusted to 59 mph at the National Weather Service Office. Benton County 3 E Warsaw 28 1900CST 0 0 4 3 Thunderstorm Winds Trees were uprooted. Dunklin County Kennett 29 1700CST 1 0 0 0 Lightning A 19-year-old man was killed when struck by lightning. Lightning evidently hit a nearby oak tree. (M19?) MONTANA Garfield County Jordan 01 2040MDT 0 0 2 0 Thunderstorm Winds (G61) McCone County 10 NE Vida Yellowstone County Billings 02 1500MDT 0 0 3 4 Thunderstorm Winds (G52) Powell County Powell County		Lar	rge tree limi	bs were blo	own down	•				
Benton County 3 E Warsaw 28 1900CST 0 0 4 3 Thunderstorm Winds Trees were uprooted. Dunklin County Kennett 29 1700CST 1 0 0 0 Lightning A 19-year-old man was killed when struck by lightning. Lightning evidently hit a nearby oak tree. (M19?) MONTANA Garfield County Jordan McCone County 10 NE Vida Yellowstone County Billings 01 2240MDT 0 0 0 0 0 Thunderstorm Winds (G52) Yellowstone County Billings 02 1500MDT 0 0 0 3 4 Thunderstorm Winds Powell County	Platte County MCI WSO	28	0447CST	•		0	0	0	0	Thunderstorm Winds
Trees were uprooted. Dunklin County Kennett 29 1700CST 1 0 0 0 Lightning A 19-year-old man was killed when struck by lightning. Lightning evidently hit a nearby oak MONTANA Garfield County Jordan McCone County 10 NE Vida Yellowstone County Billings 02 1500MDT 0 0 0 3 4 Thunderstorm Winds Thunderstorm Winds Thunderstorm Winds Thunderstorm Winds Thunderstorm Winds Thunderstorm Winds Thunderstorm Winds Thunderstorm Winds Thunderstorm Winds Thunderstorm Winds Thunderstorm Winds Thunderstorm Winds Thunderstorm Winds Thunderstorm Winds Thunderstorm Winds		Wi	nd gusted to	59 mph a	at the Natio	onal V	Weath	er Ser	vice O	ffice.
Dunklin County Kennett 29 1700CST 1 0 0 0 Lightning A 19-year-old man was killed when struck by lightning. Lightning evidently hit a nearby oak MONTANA Garfield County Jordan McCone County 10 NE Vida Yellowstone County Billings 01 2240MDT 0 0 0 0 0 Thunderstorm Winds (G52) 70 1500MDT 0 0 0 3 4 Thunderstorm Winds 70 10 3 1500MDT 0 0 0 3 4 Thunderstorm Winds 80 1500MDT 80 1500M	Benton County 3 E Warsaw	28	1900CST			0	0	4	3	Thunderstorm Winds
Kennett 29 1700CST 1 0 0 0 Lightning A 19-year-old man was killed when struck by lightning. Lightning evidently hit a nearby oak tree. (M19?) MONTANA Garfield County Jordan 01 2040MDT 0 0 2 0 Thunderstorm Winds (G61) McCone County 10 NE Vida 7 01 2240MDT 0 0 0 0 Thunderstorm Winds (G52) Yellowstone County Billings 02 1500MDT 0 0 3 4 Thunderstorm Winds Powell County		Tre	es were up	rooted.						
MONTANA Garfield County Jordan O1 2040MDT McCone County 10 NE Vida Yellowstone County Billings O2 1500MDT O 0 0 3 4 Thunderstorm Winds O2 1500MDT O 0 0 3 4 Thunderstorm Winds O3 0 0 3 4 Thunderstorm Winds	Dunklin County Kennett	29	1700CST			1	0	0	0	Lightning
Garfield County Jordan 01 2040MDT 0 0 2 0 Thunderstorm Winds (G61) McCone County 10 NE Vida 01 2240MDT 0 0 0 0 Thunderstorm Winds (G52) Yellowstone County Billings 02 1500MDT 0 0 3 4 Thunderstorm Winds Powell County		A I	19-year-old e. (M19?)	man was l	cilled wher	struc	ck by	lightn	ing. I	ightning evidently hit a nearby oak
Jordan 01 2040MDT 0 0 2 0 Thunderstorm Winds (G61) McCone County 10 NE Vida 01 2240MDT 0 0 0 0 Thunderstorm Winds (G52) Yellowstone County Billings 02 1500MDT 0 0 3 4 Thunderstorm Winds Powell County	MONTANA									
10 NE Vida 01 2240MDT 0 0 0 Thunderstorm Winds (G52) Yellowstone County Billings 02 1500MDT 0 0 3 4 Thunderstorm Winds Powell County	Jordan	01	2040MDT	٢		0	0	2	0	Thunderstorm Winds (G61)
Billings 02 1500MDT 0 0 3 4 Thunderstorm Winds Powell County	10 NE Vida	01	2240MD7	ſ	•	0	0	0	0	Thunderstorm Winds (G52)
Powell County Deer Lodge 02 1515MDT 0 0 3 0 Urban Flooding		02	1500MD7	ſ		0	0	3	4	Thunderstorm Winds
· · · · · · · · · · · · · · · · · · ·	Powell County Deer Lodge	02	1515MDT	Γ		0	0	3	0	Urban Flooding
Nearly three-quarters of an inch of rain fell in 15 minutes, overloading the storm drains.		Ne	arly three-q	uarters of	an inch of	rain i	fell in	15 m	inutes,	overloading the storm drains.
Lewis and Clark County Helena 02 1545MDT 0 0 5 5 Thunderstorm Winds (G57)	Lewis and Clark County	ന	15//5MD3	r		٥	0	5	5	Thundarstorm Winds (G57)
Trees and power poles were blown down. A trailer home was destroyed.	1 IVIVIII				ere blown					` ,

0 1 7 6 Hail (1.25)
Thunderstorm Winds (G75)
Widespread damage occurred across Cascade County from a severe thunderstorm. The city of Great Falls and the surrounding area was hard hit with many roofs blown off and windows broken by wind-driven hail. Most crops in the area were destroyed. When the roof came off the Plush Pillow, boards and roofing fell on the owner resulting in an injury. Lots of power poles were blown down.

0

0

3

3

0

0

5

Thunderstorm Winds
Thunderstorm Winds

Thunderstorm Winds

Lincoln Silver Bow County

Cascade County Cascade

Great Falls

Butte

02 1600MDT

02 1600MDT

1550MDT

	Γ	<u> </u>	<u> </u>	T	NO.	OF	ESTI	MATED	JULY 1990
9		TIME			PĚŔ	SONS	DAM	AGE	
PLACE	D-60-EI	LOCAL STANDARD	LENGTH PATH (MILES)	PATH (YARDS)	K-C-EEO	OHING LA		Cacoan	CHARACTER OF STORM
MONTANA Cont	'd				<u> </u>			<u>,</u>	
Chouteau County Highwood	02	1700MDT	•		0	0	4	5	Thunderstorm Winds
Geraldine to Virgelle to Warrick to Big Sandy	02	1730MDT	•		0	0	5	7	Thunderstorm Winds (G70) Hail (1.25)
	The Sev	ere was wid veral small t	espread cr ornados w	op loss fro ere reporte	om wi	nd-di not	riven h confiri	ail. Po ned. M	ower poles and trees were downed. Many buildings were destroyed.
Carter County Ekalaka	02	2000MDT	•		0	0	4	4	Thunderstorm Winds
Flathead County 7 miles west of AP Kalispell	05 05	1915MDT 2105MDT			0	0	0	0 4	Hail (1.25) Urban Flooding
	Ove	er 2 inches	of rain fel	l in 45 mir	nutes.				
Columbia Falls	05	2110MDT	•		0	0	4	0	Lightning
Cascade County Great Falls	05	2107MDT	•		0	0	4	4	Thunderstorm Winds (G59)
	Pov	wer lines an	d a few tre	ees were k	nocke	d dov	wn.		•
Chouteau County									
10 mi NW Ft. Benton Big Sandy Rosebud County	05 06	2110MDT 1500MDT		?	0	0	0	0	Tornado (F0) Hail (1.25)
East of Colstrip (7 miles)	06	2210MDT	,		0	0	0	0	Hail (1.00)
Ròosevelt County Wolf Point Culbertson	10 10	1700MDT 1730MDT			0	0	4 4	4	Hail (1.25) Hail (1.25)
Yellowstone County 3 West of Billings	13	1800MDT	7		0	0	3	0	Lightning
	Lig	htning struc	ck a house	•					
Cascade County 5 West of			_		_				
Great Falls		1112MDT			0	0	3	0	Lightning
	Lig	htning struc	ck a house	•	•				
Hill County 10 South Havre	25	1000MDT	•		0	0	0	0	Hail (1.00)
Roosevelt County Poplar	25	1000MDT			0	0	4	5	Flash Flood
	Fou	ur inches of	rain fell i	n 15 minu	tes ju	st we	st of P	oplar.	
Garfield County Jordan and surrounding area	25	1800MDT			0	0	4	5	Thunderstorm Winds Hail (1.00)

	T-	I		1	I NO	OF.	FSTI	MATED	JULY 1990
		TIME				SONS	ESTIN DAM/	_	۲٠
PLACE	D E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	L L	CHOOCLE.	com o O o o	CEOLV	CHARACTER STORM
					D	Ĕ	R Y		
MONTANA Con	t'd								
Phillips County Malta	26	0905MDT	•		0	0	4	4	Flash Flood
	Url	oan flooding	g occurred	with water	r ove	r Higl	hway 2	242 nor	th of Malta.
Fallon County 4 mi North Baker Wibaux County	26	1445MDT	•		0	0	4	5	Hail (1.75)
6 East of Wibaux Richland County Northeastern part	26	1530MDT	•		0	0	4	5	Hail (1.75)
of County	26	1600MDT			0	0	4	6	Hail (2.00) Heavy Rains
	The	ere was exte	ensive crop	damage.					
Madison County Silver Star to Twin Bridges	31	1710MDT	•		0	0	5	6	Flash Flood
	A 9 Hig dit	90-minute s ghway 41 w ches.	torm prod as washed	uced nearl out and th	y 3 in here v	nches was ex	of rain xtensiv	n near e dama	Silver Star causing flash flooding. age to crops, homes, and irrigation
NEBRASKA									
Sarpy County Bellevue	04	1800CST			0	3	0	0	Lightning
	A 1	ightning str	ike slightly	y injured t	hree j	people	in the	eir back	k yard.
Sarpy County Papillion	06	1700CST			0	0	4	0	Lightning
	A 1	ightning str	ike damag	ed the root	fand	side o	of a ho	use.	
Sheridan County Lakeside	07	2014CST			0	0	?	?	Hail (0.75)
	Hai	l completel	y covered	the ground	l.				
Cheyenne County Sidney	09	2008CST			0	0	?	?	Thunderstorm Winds (G56)
Sioux County 12 N Harrison	09	Evening			0	0	?	?	Flash Flood
	Up Roa	to 5 inches ads and field	of rain fel is were co	l in Monro vered with	e Ca wate	nyon a	and Ha a culv	t Creel ert wa	k Valley in northern Sioux County. s washed out.
Scotts Bluff County 3 SE Scottsbluff	10	2208CST			0	0	0	0	Funnel Cloud
Morrill County 5 SW Bridgeport	10	2240CST			0	0	0	0	Funnel Cloud
Morrill County 1 W Bayard	11	2245CST	?	?	0	0	?	?	Tornado (F0)

A tornado briefly touched down near a sugar factory just west of Bayard.

							•			
]	TIME			NO.	OF SONS	EST IM	AIED		JULY 1990
PLACE	D	LOCAL STANDARD	LENGTH PATH (MILES)	WIDTH PATH (YARDS)	K-1-mD	OmmoC-25-		OMDOTAN .	CHARACTER OF STORM	
NEBRASKA Cor	nt'd									
Sheridan County Rushville	16	1930CST			0	0	?	?	Thunderstorm Winds	s (G70)
Blaine County 8 E Brewster	17	1730CST			0	0	?	?	Hail (1.75)	
Hayes County 6 N Hamlet	17	2100CST			0	2	?	?	Lightning	
	tho	htning sparl usand acres oke inhalation	were burn	s fire. Gus ned before	ty win	nds fa ire wa	nned thas cont	ne fire ained.	and caused it to spread a Two fire fighters wer	quickly. Six e treated for
Lincoln County 10 S Brady	18	Early Morning			0	0	?	?	Lightning	
	Lig	htning start	ed a grass	fire which	burr	ed an	area 2	miles	s long and 3 miles wide	••
Sioux County 20 N Scottsbluff	18	1600CST			0	0	0	0	Funnel Cloud	
Box Butte County 8 NW Alliance 12 W Hemingford	18 18	1600CST 1603CST	?	?	0	0	0 3	0 2	Funnel Cloud Tornado (F0)	
	A to	ornado was ter tanks 60	reported o O yards an	n the grou d smashed	nd for a con	apprombine	oximate reel in	ely 10 nto a j	to 15 minutes. It move unked car.	d two plastic
Clay County Harvard to Sutton	19	1030CST- 1800CST			0	0	6	5	Flash Flood	
	ban Cor to p dan \$96 fari	ks and floo unty to total private dwel nages of \$1	ded the Su over \$700 lings, \$14 76,950 wholic proper and dwelli	itton City 0,000. Har 7,500 to b ich include ty. Rural ings, \$20,0	Park. vard: usine ed \$62 dama 000 to	Civi report sses, a 2,500 iges ad grain	l deter ed dan and \$4: to priv cross n bins,	nse off nages of 5,300 vate dv orther and \$1	lay County. Six inches The rain flooded street utton. School Creek or icials evaluated the dan of \$255,500 which inclute public property. Sut wellings, \$18,450 to bus in Clay County included 100,000 to county roads	nage in Clay ded \$62,700 iton reported sinesses, and
Cass County Plattsmouth	19	1850CST			0	0	3	0	Thunderstorm Winds	;
	Str	ong winds f	elled trees	, which kn	ocke	dout	power	lines a	and damaged some outb	uildings.
Sheridan County 2 N Clinton	20	1345CST	?	?	0	0	?	?	Tornado (F0)	
	A t	ornado brie	fly touched	d down.						
Scotts Bluff County Scottsbluff to Mitchell 2 S Morrill	20 20	1430CST 1522CST			0	0	0	0	Funnel Clouds Funnel Clouds	
W SYNYESTES	Nu		nel cloud ational We	sightings ather Serv	in the	e Sco	ttsblufi	. •	chell, and Morrill area	is were also
Box Butte County 3 SE Alliance	20	1600CST		- 2	0	0	0	0	Funnel Cloud	•

		TIME			NO.	OF SONS	ESTI	MATED	JULY 1990
PLACE	D E	LOCAL STANDARD	LENGTH PATH (MILES)	WIDTH OF PATH (YARDS)	K L	- A JORNO		CECOLO	CHARACTER OF STORM
NEBRASKA Con	t'd								
Morrill County 10 S Alliance	20	1622CST			0	0	0	0	Funnel Cloud
Scotts Bluff County 8 SE Minatare	20	1622CST			0	0	0	0	Funnel Cloud
Dodge County Scribner Fremont	25 25	0730CST 0740CST			0	0	2 4	3 1	Hail (1.00) Thunderstorm Winds
	Thu stre	inderstorm v ets during th	vinds at Fr he mornin	remont bro g.	ke tre	æ liml	bs and	caused	power outages. Heavy rain flooded
Saunders County Ashland	25	1110CST			0	0	4	0	Lightning
	Lig	htning struc	k a house	, starting a	fire	in the	attic.	Dama	ige was \$6,000.
Buffalo County 10 NE Kearney to 5 NNE Shelton	25	1540CST- 1615CST	8	50	0	0	5	0	Tornado (F1)
	mile a m syst	es north-nor achine shed	theast of S blown apa I. Anothe	Shelton. T art, a sheep er farm ha	hree shed d hali	farms destre f a ba	sustai oyed, a rn roo	ned da ind two f blowr	ed slowly northeast before lifting 5 mage along its path. One farm had a sections of a center pivot irrigation off and five trees destroyed. The naged.
Buffalo County 2 S Shelton	25	1615CST	2	30	0	0	0	0	Tornado (F0)
	A t	ornado brief	ly touched	d down wi	th no	appa	rent da	mage.	
Hall County 2 W Wood River	25	1625CST	1	20	0	0	0	0	Tornado (F0)
	A to	ornado brief	ly touched	d down wi	th no	appa	rent da	mage.	
Hamilton County Aurora	25	1630CST- 1930CST			0	0	5	0	Flash Flood
	Rai eva and	nfall reports cuation of b	ranged fretween 50 and homes	om 4.50 to and 60 re	7 in siden	ches. its fro	Flood m two	ing of trailer	of Hamilton County near Aurora. Lincoln Creek at Aurora caused the courts, an elderly housing project, it units at the housing project were
York County 4 SW Gresham to 5 SSE Gresham	25 26	1630CST- 2100CST			0	0	4	0	Flash Flood
	Ove	er 4 inches c	of rain fell	in the Gr	eshan	n area	flood	ing roa	ds, bridges, and fields.
Cass County	25	1630CST- 0200CST		•	0	0	6	7	Flash Flood

Very heavy rain fell over Cass County. Rainfall amounts ranged from 7.90 inches at Plattsmouth, 7.50 inches at Weeping Water, 5.81 inches at Union, to 5.58 inches at Greenwood. Roads were flooded and a number of roads, bridges, and small earthen dams were washed out. Crops were heavily damaged and fields were eroded and silted. Weeping Water Creek crested

	1	IME		NO.	OF SONS	ESTIM	ATED	JULY 1990
PLACE	D LO	CAL LENGTH NO PATH (MILES)	WIDTH OF PATH (YARDS)	K L E D	-2-0000		COCOL	CHARACTER Of Storm
NEBRASKA Co	nt'd			_	_			
	around 8 on the 20 Twelve	6th at Union an families were	id Newhawk evacuated 3	a and miles	railro	oad trac	cks we uisville	feet over flood stage early morning fre washed out south of Plattsmouth e when Cedar Creek flooded. Sal during the morning of the 26th.
Sarpy County		OCST- OCST		0	0	3	4	Flash Flood
	Springfie	storms produce eld. Water wa ere damaged.	ed very heav s over High	y raii way 7	ove 7 jus	r Sarpy t south	Coun of Of	ity, including 4.75 inches of rain a fut AFB. Fields were flooded and
Hamilton County Aurora	25 170	OCST		0	0	3	0	Hail (1.00)
,	Storm sp	otters reported	quarter-size	hail.				
Saunders County		OCST- OCST		0	0	5	6	Flash Flood
	4.65 inc roads, e Ashland northeas	hes at Ashland roded fields, a from 5.40 in t of Wahoo. W	l, 4.40 inche nd damaged ches of rain /ahoo Creek	es at crop upst creste	Ithaca s. S ream. ed 1.5	i, and alt Cre Sand 50 feet	4.16 in tek rea d Crea over fl	rts included 6.40 inches at Ceresco nches at Wahoo. The rain flooded ached 4.30 feet over flood stage a ek flooded Highway 77 two mile lood stage near Ithaca early morning I Highway 77 south of Ceresco.
Lancaster County	25 173 26 180	OCST- OCST		0	0	. ?	5	Flash Flood
	Over 5 i	nches of rain f	ell over Lan	caster	Cou	nty, flo	ooding	fields and roads.
Otoe County	25 173 26 010	OCST- OCST		0	0	4	6	Flash Flood
	were flo	62 inches of rai oded and erode d caused mud	d and crops	raska were	City. dama	. Vehigiged.	cles sta Γhe wa	alled on water-covered roads. Field ater washed out a number of earther
York County 8 N York	25 174	5CST		0	0	3	0	Thunderstorm Winds (G52)
	Thunder	storm winds g	isting to 60	mph	cause	d tree	damage	e.
Lancaster County Lincoln	25 213	OCST		0	0	3	0	Lightning
	Lightnin	ig started a fire	which caus	ed \$2	,200	damage	e to a l	house.
Lancaster County Lincoln	25 214	5CST		0	0	2	0	Flash Flood
	Overflow underpas	w from Deadr ss. The Lincol	nans Run s n Fire Depa	trande rtmen	ed fo t resc	our car cued se	s on veral r	Cornhusker Highway at Havelock motorists but there were no injuries
Douglas County Elkhorn	26 200	OCST		0	1	0	0	Lightning
	A lightn	ing strike injui	ed a woman	in he	r fro	nt yard	l .	

Flash Flood

Water damaged \$3,000 worth of paper at a printing company.

Lancaster County Lincoln

26 2230CST

JULY 1990 ESTIMATED DAMAGE NO. OF PERSONS TIME LENGTH OF PATH WIDTH OF PATH LOCAL CHARACTER PLACE STANDARD STORM (MILES) (YARDS) Ē NEBRASKA Cont'd Polk County 28 1400CST 3 3 NE Shelby Thunderstorm Winds (G60) Flight Service Station personnel reported several trees knocked down from winds gusting up to 70 mph. Cheyenne County Hail (1.75) Flash Flood ? Potter 28 2010CST Hail up to golf ball-size covered roads up to 6 inches deep and had to be removed by road graders. Some stones were still on the ground Sunday afternoon. The hail damaged wheat, bean, and corn crops. Heavy rain from thunderstorms covered Interstate 80 near the Cheyenne-Kimball County line, caused Lodgepole Creek to overflow its banks, and flooded basements. **NEVADA** 08 0130PST-Clark County 0630PST Flash Flood A large area of slow-moving thunderstorms dropped heavy rain on the Lake Meade area. Flash flooding was reported in the Overton area and, on the Arizona side of the lake, at Temple Bar. An observer at Logandale measured 2.48 inches of rainfall in a little over 3 hours. **Lyon County** 09 1600PST 1700PST 0 0 High winds Outflow winds from the afternoon thunderstorm activity produced very strong winds in the Dayton area. Gusts to 70 mph were reported. Hail (1.00) **Lyon County** 13 1315PST A severe thunderstorm produced 1-inch hail stones near Dayton. **Douglas County** 1600PST 13 1800PST Flash Flood 2 0 Slow-moving thunderstorms produced flash flooding. Seven miles south of Gardnerville, the north bound lanes of U.S. Highway 395 were closed for a while with water running across the roadway. Street flooding was reported in Gardnerville. Clark County 1930PST-2130PST **High Winds** 1930PST-13 0 2 0 Flash Flood 2130PST Thunderstorms produced heavy rain in the Lake Meade area. Flash flooding was reported in the Valley of Fire State Park. Two- to 3-feet of water flowed over roadways. Outflow from the storms produced steady winds in excess of 50 mph in the Echo Bay area. Clark County 0900PST-1145PST 2 0 Flash Flood

2215PST-Clark County 15 2345PST 3 Flash Flood

Charleston Highway.

Rainfall from a thunderstorm of 1.80 inches in about an hour and a half resulted in flash flooding in the Mount Charleston Recreation Area. Mud, rocks, and water rushed over the Mount

0

		TIME			NO. PER	OF SONS	ESTI	MATED AGE		JULY 19
PLACE	D	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	P L	CHINGC AND	4-68mg0ara	ORODO.	CHARACTER OF STORM	

NEVADA Cont'd

Slow-moving thunderstorms produced heavy rain over the Las Vegas area. Las Vegas Police and Fire Departments reported flash flooding on the west side of the city. More than 3 feet of water flowed down the west end of Sahara Avenue. Over 6 feet of water flowed down normally dry Flamingo Wash. Rainfall totals for this area ranged from 0.83 inch in the Angel Park area to 1.65 inches in Blue Diamond.

Elko County

29 1656PST

0 High winds

A downburst from convective activity produced strong winds in the Elko area. A gust to nearly 60 mph was reported at the Elko Airport. Elko Police reported one tree blown down and considerable blowing dust.

NEW HAMPSHIRE

NEW HAMPSHI	KE						
Belknap County	20	1240EST	0	0	6	0	Thunderstorm Winds
	boa Tre Bos Pov	ts to overturn, knocked out powe es landed on several houses, shec ton Whaler boat was smashed t	r, tos is, an o pie	sed doo d cars ces wh	cks, an near the nen a	d blev he lake 70-foo	esaukee area. Strong winds caused whuge trees down in Centre Harbor. e shore in the same area. A 15-foot of tree fell on it in Centre Harbor. nborough, Centre Harbor, and
Carroll County	20	1305EST	0	0	5	0	Thunderstorm Winds
	Tre	es and power lines were blown o	lown	in Mo	ultonb	oroug	h.
Merrimack County	23	1754EST	0	0	?	0	Thunderstorm Winds
	Thi	anderstorm winds brought trees of	lown	in Ne	w Lon	don.	
Chesire County	23	Night	0	0	?	0	Thunderstorm Winds
	Hig	h winds downed power lines and	d tree	s in K	eene.		
Sullivan County Merrimack County	23	Night	0	0	?	0	Flooding
	Hea Nin	vy rains caused flooding of road e roads were washed out in New	s in N vport.	Newpo	rt, Nev	w Lon	don, Cornish, Flat, and Claremont.
Rockingham County	24	Afternoon	0	1	0	0	Lightning
	thro	2-year-old boy was struck by libugh several objects, blew up a was treated for minor burns on the struck burns on the struck burns of the struck b	water	pump	Newto	n. Ti circuit	he bolt hit in his backyard, passed panel, and entered the boy's face.
							·

NEW JERSEY, Northern

Warren County Washington Warren County Washington Hunterdon County Lebanon Bergen County Old Tappan	01 01 01 01	1315EST 1315EST 1330EST 1358EST	0 0 0	0 0 0 0	? ? ?	0 0 0	Hail (1.75) Thunderstorm Winds (G52) Thunderstorm Winds Thunderstorm Winds
Old Tappan Sumerset County			-	-	?	0	
Franklin Twp. Essex County Newark	01 01	1400EST 1410EST	0	0	?	0	Thunderstorm Winds Thunderstorm Winds

JULY 1990

		TIME		, .	NO.	OF SONS	ESTI!	MATED AGE	
PLACE	D E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	Comp.	CHINCLE	4-00m00x0	CECOEN	CHARACTER OF STORM

NEW JERSEY, Northern Cont'd

A cold front moved rapidly across northern New Jersey replacing very warm air near the surface. This produced several damaging thunderstorms and hail. Washington, in Warren County, was by far the hardest hit. Numerous trees and power lines were downed. Golf ball-size hail was also reported. Elsewhere, Hunterdon, Somerset, and Essex counties reported various degrees of damage due mainly to fallen trees and power lines.

Hunterdon County Lambertville	05	14
Hunterdon County Lambertville	05	14
Middlesex County Monroe Twp.	05	14
Monmouth County Englishtown	05	14

05	1400EST	0	0	?	0	Hail (0.75)
05	1400EST	0	0	?	0	Thunderstorm Winds
05	1425EST	0	0	?	0	Hail (1.75)
05	1445EST	0	0	?	0	Hail (1.75)

A hot and humid air mass over the area was replaced by cooler air moving in behind a cold front. Along this boundary, thunderstorms developed which produced damaging winds and hail. Golf ball-size hail was reported at Monroe township and Englishtown. In Monroe township the hail completely covered the ground.

Warren County
Warren County Phillipsburg Hunterdon County
Hunterdon County
Somerset County
Franklin Park
Middlesex County
5 mi South of
New Brunswick
Middlesex County
Near Islen
Monmouth County
Colts Neck
Monmouth Beach
Red Bank
Somerset County
Montgomery
Montgoniciy

Thunderstorm Winds Thunderstorm Winds	0	?	0	0	1500EST 1505EST		0
Thunderstorm Winds	0	?	0	0	1530EST	•	0
Thunderstorm Winds	0	?	0	. 0	1530EST)	0
Thunderstorm Winds	0	?	0	0	1545EST	•	0
Thunderstorm Winds	0	?	0	0	1600EST	•	0:
Thunderstorm Winds	0	7	0	. 0	1630EST	3	0

A squall line developed in a very warm and unstable air mass ahead of a cold front moving southeastward across New England. Many damaging thunderstorms formed along this squall line during the midafternoon hours downing numerous trees and power lines across sections of northern New Jersey. These storms also produced some locally heavy rains which caused some brief flooding of streets and highways.

NEW JERSEY, Southern

Ucea	n Count	ÿ
3 N	n Count E Toms	River
	Breton	
	nt Pleas	

01 1555EST	orm Winds	Funnel Cloud Thunderstorm V Hail (1.50)	0 0 ?	0 3 ?	0 0 0	0 0 0	1552EST 1555EST 1600EST	01 01 01
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Thunderstorm wind gusts downed trees in Dover Township north of Breton Woods. A funnel cloud was reported in Brick Township northeast of Toms River. Hail slightly smaller than golf ball-size was reported in Point Pleasant.

Merc	er C	ounty
2.5	SW	ounty Penni

2.5 SW Pennington 05	1415EST	0	0	3	?	Thunderstorm Winds
West Trenton 05	1420EST	0	0	3	0	Thunderstorm Winds
		0	0	?	0	Hail (1.00)
Hamilton Square 05	1422EST	0	0	3	0	Thunderstorm Winds (G52)
Lawrenceville 05	1422EST	0	3	4	0	Thunderstorm Winds (G57)

		TIME			NO.	OF SONS	EST IN	MATED	JULY 1990		
PLACE	DAO-E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K-T-TED	OHING C.E.	P.800->-	OBODW	CHARACTER OF STORM		
NEW JERSEY, Southern Cont'd											
Mercer County Arpt (TTN)	05	1423EST			0	0	?	0	Thunderstorm Winds (G50) Hail (0.75)		
White Horse Titusville 1 NW Edinburg 1 NW Dutch Neck 2 NE Robbinsville Trenton	05 05 05 05 05 05	1423EST 1425EST 1427EST 1427EST 1430EST 1437EST			00000	00000	??335333	0 0 ? ?	Thunderstorm Winds (G52) Thunderstorm Winds (G52) Thunderstorm Winds Thunderstorm Winds Thunderstorm Winds Thunderstorm Winds Thunderstorm Winds		
	Cou Tov dan by hou size	mph in Har unty Airpor wnship. Als naged tennis a falling tre use in Trento	milton Squ t. Hundr so, roofs w s courts at se at a tens on. Falling	are, at 65 eds of tree ere blown the park w nis camp n g trees dan	mph es we off by ith to lear L laged	in La re do uildin otal da awre a nur	wrence wned gs, boa amage ncevill nber of	eville, in Men it dock about e. Po f house	ty lines in many locations throughout White Horse and Titusville, at 50 to and measured at 58 mph at Mercer reer County Park in West Windsor's were blown away, and falling trees \$100,000. Three girls were injured rtions of the roof were blown off a es throughout the county. One-inchinch hail fell at the Mercer County		
Ocean County Lakehurst NAS (NEL) Manahawkin	05 05	1456EST 1625EST			0	0	?	0	Thunderstorm Winds (G52) Thunderstorm Winds		
	Thu	inderstorm mph at Lak	wind gusts ehurst Nav	downed u al Air Sta	itility tion.	lines	and po	oles in	Manahawkin and were measured at		
Atlantic County Hammonton	05	1545EST			0	0	??	ò	Thunderstorm Winds (G53)		
Mays Landing	05	1600EST			ŏ	0	3	?	Hail (1.00) Thunderstorm Winds		
	61 1	mph in Ham	montón. (One-inch h	ail als	so fell	in Har	nmont	Mays Landing and were measured at on. Heavy downpours dropped 1.38 ing in Mays Landing.		
Cumberland County Millville Municipal Airport (MIV)	05	1605EST			0	0	?	0	Thunderstorm Winds (G50)		
	Thu	understorm	wind gusts	were mea	sured	l at 5	8 mph.				
Cape May County 3 N Cape May Cou House Ocean City	ort 05 05	1705EST 1720EST			0	0	3 3	0	Thunderstorm Winds Thunderstorm Winds		
	Thu	ınderstorm	wind gusts	downed t	rees a	and u	tility li	nes.			
Ocean County 2 S Van Hiseville Point Pleasant	09 09	1730EST 1730EST			0	0	3	0	Thunderstorm Winds Thunderstorm Winds		
	Thu	ınderstorm	wind gusts	downed t	rees a	and u	tility li	nes.			
Atlantic County Atlantic Intl Arpt (ACY)	09	1818EST			0	0	?	0	Thunderstorm Winds (G90)		

	Τ		<u> </u>	<u> </u>	NO.	OF SONS	ESTI	MATED AGE		JULY 1990
	Q	LOCAL	LENGTH	MIDTH	PER	SONS	<u> </u>			
PLACE	Ē	STANDARD	PATH	WIDTH OF PATH	ľ	Ŋ	o acOo was	0000 N	CHARACTER OF STORM	
	-		(MILES)	(YARDS)	Ē	CHINCLE	R	S	STORM	
	<u>L</u> _	<u> </u>		<u> </u>			Ý			
NEW JERSEY, S	Sout	hern Cont	'd							
Ocean County Avalon	12	1735EST			n	Λ	9	0	Thunderstorm W	inde (G52)
Stone Harbor	12	1735EST		•	0	0	?	ŏ	Thunderstorm W	inds (G52)
	The	understorm	wind gusts	were repo	orted	at 60	mph.			
NEW MEXICO									. •	•
Santa Fe County Edgewood	09	1700MST 1730MST	-		0	0	3	0	Flash Flood	•
	On of	e and eight- roads aroun	tenths of a d and in th	n inch of rate town of	ain in Edge	a fift wood	y-minı	ıte peri	od caused flooding	and washing out
Eddy County 5 SW Lakewood	12	1148MST	0.2	10	0	0	0	0	Tornado (F0)	
3 2 W Lakewood		all rope-like								
McVieley County	13	an 10pe-11ke		dened dow	11 011	city i	и орси	. count	ıy.	
McKinley County Gallup	13	1700MST			1	0	3	0	Flash Flood	
	dee to d in l mil	p, caused floross a flood	ooding of led canal. death from Gallup, bu	roads, cana His picku n cold wat nt prelimin	els, and property truckers of the contract of	rroyos k ove ownin idicat	s, and s erturned g. And ions ar	streams d, trap other b e that	of generally small: of one person drow ping him underwate ody was found in the died on the 10th 16V)	med when trying or which resulted ne Rio Puerco 12
Sandoval County Jemez Springs	13	1615MST			0	0	0	0	Hail (0.75)	
	Th	ree-quarter-i	nch hail w	as reporte	d by	a coo	perativ	e obse	rver.	
San Miguel					_		_			
County Las Vegas	13 13	1615MST 1800MST			0	0	3 0	0	Flash Flood Hail (0.75)	
	Tw to	o inches of a	rain in a 90 os, collaps)-minute pe ed ceilings	riod,	coup prod	led wit uced w	h marb videspr	ole- to dime-size hail lead flooding.	, caused damage
Los Alamos County White Rock	13 13	1630MST 1730MST	•		0	0	3 0	0	Hail (1.75) Thunderstorm W	ind (G50)
	Go wir	lf ball-size h idshields.	ail and wi	nd gusts to	50 k	nots (caused	damag	ge to solar panels, sl	cylights, and car
Sandoval County Rio Rancho	13	1630MST			0	0	0	0	Hail (1.00)	
	On	e-inch-size l	nail was re	ported by	a Na	tional	Weath	ner Ser	vice meteorologist.	
Barnalillio	13	1647MST			0	Λ		0	Hail (1 00)	
County Albuquerque	13	1650MST			0	0	0	ŏ	Hail (1.00) Hail (0.75)	

One-inch-size hail was reported at Coronado Airport and at the ARTCC. One-inch rains in Albuquerque caused runoff water in the arroyos in which a young boy was swept downstream for 5 miles. He was rescued and did not suffer any physical injuries.

JULY 1990

		TIME			NO. PER	OF SONS	EST II	AATED AGE	
PLACE	D A E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	KILLING	OMBC LET	4-cam 5020 0	NTON	CHARACTER OF STORM

NEW MEXICO Cont'd

Sandoval County Corrales

13 1730MST

0

Hail (0.75)

Hail was reported by a cooperative observer.

Lincoln County Capitan

13 1730MST

Funnel

A funnel cloud was observed near the Capitan Airport both by the sheriff's office and a pilot.

Colfax County Angel Fire Taos

1600MST-1625MST

? ? 0

Hail

0

Marble-size hail was reported 5 inches deep on the ground in the town of Angel Fire and between Angel Fire and the town of Taos.

Sandoval County Rio Rancho

14 1648MST

Funnel

A funnel cloud was reported by the public in Rio Rancho.

14 1656MST

Hail (1.00)

Three-quarter to 1-inch-size hail reported in Rio Rancho.

1658MST 1630MST-

0

Thunderstorm Wind (G63)

1730MST 0 5 0 Flash Flood

Heavy rains, hail, and strong winds produced about \$250,000 damage in Rio Rancho. Damage was mainly caused by undermining of roads and driveways from flood waters and overflowing of arroyos into homes.

Sandoval County Corrales

1630MST-14 1730MST

0 0 O 6

Flash Flood

Similar flash flood conditions occurred in Corrales as they did in Rio Rancho above. Damage was estimated to be around \$600,000.

Bernalillio County Albuquerque

1651MST-1710MST 1711MST

10 0.2

0 0 0 ? 0 ? 0 0

Funnels Tomado (F0)

14 14 1700MST-

1733MST

Hail (1.00) Thunderstorm Wind (G63)

1900MST Flash Flood

This severe thunderstorm caused heavy rains up to 1.75 inch, three-quarters to one-inch-size hail and observed wind gusts of 52 to 63 knots. Trees were uprooted, roads and arroyos flooded; many were undermined, which caused them to collapse. Funnel clouds and middle-level cloud rotation were observed by the public and by three or more National Weather Service meteorologists at separate locations throughout the city. Twenty-five thousand dollars damage occurred to the Dukes baseball stadium, \$100,000 damage at Kirtland Air Force Base as well as major damage throughout the Rio Grande Valley in the vicinity of the city. This severe thunderstorm developed near the Jemez Mountains and moved south down the Rio Grande Valley, causing widespread damage in Rio Rancho, Corrales, and the Albuquerque area before diminshing south of Albuquerque. Estimated damage in the Albuquerque area was over \$500.000. \$500,000.

	Γ			T	NO.	OF SONS	ESTI	MATED AGE		JULY 1990
		LOCAL	I ENCTR	עדמזע	PER	SONS	 		i.	
PLACE	E	STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	C T TWO	CHICACLE	4- 20m 2020 0	W TO COR	CHARACTER OF STORM	
NEW MEXICO (Cont	t'd								
Union County Amistad	17	1745MST	•		0	0	0	0	Hail (1.00)	
	Dir incl	ne-to nickel- hes deep, as	size hail a reported	and 50 to 5 by the Fire	55 mj e Chi	oh win	nds we Amista	re repo d. (Ti	orted at Amistad. Ha me is estimated.)	il was 2- to 8-
Quay County Tucumcari	17	2013MST						*	Funnel	
	A f	unnel was sported to the	potted sou Tucumcai	theast of Tri Sheriff's	Tucur offic	ncari æ.	by the	superi	ntendent of ambulance	e services and
Santa Fe County White Rock	20	1600MST			0	0	7	?	Hail (1.75)	
	cro	e Los Alamo ttered windo ps. Estimat ne of this ev	es by ins	urance cor	er, Oo s, dan npani	tober maged es, et	14, 19 l roofs tc., sta	990, ed and str ited tha	lition reported: "Gol ructures, and devastate at damage exceeded S	f ball-size hailed gardens and \$8.8 million."
Eddy County 4 W Carlsbad	21	2050MST	0.2	10	0	0	0	0	Tornado (FO)	
		ined spotter roximate)	rs reporte	d a torna	do (in op	en cou	ıntry)	to the sheriff's offi	ce. (time is
Santa Fe County Cerrillos	22	1700MST			0	0	3	0	Microburst Wind	
		nobile home nolished.	was desti	royed by w	ind.	The	home	was pa	rked and still on its w	vheels but was
Torrance County Estancia	22	1815MST			0	0	0	?	Hail (1.00) Thunderstorm Win	d (G61)
	Tre	e damage oc	curred wi	th 1-inch-s	size h	ail an	d wind	d gusts	to 70 mph.	
Torrance County McIntosh	22	1838MST- 2000MST			0	0	?	0	Flash Flood Hail (1.00)	
	One and	e-inch size h in and betw	ail and 1.7	20 inches o	of rai	n in a y and	15-mi Edgev	nute powood.	eriod washed out road	ls in McIntosh
Torrance County Estancia Mountainair	22	1900MST- 2115MST			0	0	?	?	Flash Flood	
	Roa rain		hed out w	ith tree dar	nage	in the	Estano	cia and	Mountainair areas bec	cause of heavy
Dona Ana County White Sands	22	2115MST			0	0	0	0	Thunderstorm Win	d (G61)
	Gus	sts to 61 knc	ts were re	ecorded at	the S	tallio	n site a	at Whit	te Sands Missile Rang	ge.
Mora County 10N Wagonmound	23	1430MST	0.2	10	0	0	0	0	Tornado (F0)	

Tornado (F0) Brief touchdown of a tornado was reported by KRTN Radio Station in Raton, New Mexico.

		TIME			NO.	OF SONS	EST IN	ATED GE	JULY 1990
PLACE	DA F	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K-L-HD	OMBCC & I	P 2000	COCOCO	CHARACTER OF STORM
NEW MEXICO (Colfax County	Cont	.'d							
Springer Maxwell		1417MST			0	0	0	0	Hail (0.75)
	Thr	ee-quarter-i	nch size h	ail was rep	ortec	l at M	[axwel	l and S	Springer.
Chaves County Roswell	27	1423MST							Funnel
	A f	unnel was r	eported by	the Cente	r We	ather	Servic	e Unit	, Albuquerque.
Colfax County Springer	27	1435MST			0	0	0	0	Hail (1.50)
	Hai	1 0.75- to 1	.50-inch s	ize was re	porte	d at S	pringe	r.	
Chaves County 15 SW ROW	27	1500MST	0.2	10	0	0	0	0	Tornado (F0)
	A b	rief tornado	touched	down 15 n	niles	south	west of	f the R	oswell Airport.
Colfax County Miami	27	1500MST			0	0	0	0	Hail (1.00)
	Hai	l was report	ted by the	cooperativ	e obs	erver	11 mil	es wes	st of Springer in the town of Miami.
Colfax County 3 W Springer	27	1516MST			0	0	0	0	Hail (1.00)
	Qua	ırter-size ha	il was rep	orted 3 mi	les w	est of	Sprin	ger, N	ew Mexico.
Chaves County 5-10 SW Roswell	27	1650MST							Funnel
	Spo	tters report	ed a funne	l or possib	le to	rnado	to the	Roswe	ell Police Department.
Lea County 4 N Hobbs	27	1710MST 1900MST	-		0	0	?	0	Flash Flood
	Hea Two	vy rains ca elve houses	used floo were repo	ding of ro	ads a	ind pi	roperty county	appro	eximately 4 miles north of Hobbs. efense director.
Chaves County 8 SE Roswell	27	1725MST			0	0	. 0	0	Thunderstorm Wind (G74)
	Lar	ge hail, 85	mph wind	s, and upr	ooted	trees	were	reporte	ed in East Grand Plains.
Chaves County Roswell	27	1730MST 1730MST	-		0	0	3	0	Microburst Wind
		metal barnes in diame			anotl	her ba	arn des	stroyed	, and numerous tree limbs 3 to 12
Chaves County Midway	27	1800MST			0	0	2	0	Microburst Wind
	A la	arge elm tre	e was upr	ooted by v	vind	10 mi	les sou	theast	of the city of Roswell.

Heavy thunderstorm rains caused about 6 inches of rain east of the Billy the Kid Museum in Fort Sumner. Water was one-foot deep in a field and extensive crop damage occurred. Hail broke an observer's rain gauge which at the time had over 5 inches of rain in it.

0

?

0

Flash Flood

De Baca County Fort Sumner

27 PM

JULY 1990

·		TIME			NO. PER	OF SONS	EST II	MATED AGE	
PLACE	Đ	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	נידור	- A J DRUD	- 30m 00 30 0	CACOEN	CHARACTER OF STORM

١	JFW	M	IFYI	സ	Cont'	A
1	4T) 44	TA:	LLA	\sim	COIIL	u

Lea County 5-10 N Hobbs 28 1030MST-1345MST

0 0 ? 0 Flash Flood

Heavy rains from this thunderstorm and from the previous night totaled 3.50 inches and caused damage to 75 to 100 homes, contaminated water wells, and produced road damage.

Bernalillio County Albuquerque

28 1352MST

Funnel

The public reported a funnel to the Albuquerque Police Department.

Quay County Logan

28 1920MST

0 0 0 0 Hail (1.75)

Golf ball-size hail in Logan lasted 10 minutes. A report was received by the Logan Police Department through the Sheriff's Office.

Eddy County

Carlsbad

29 1330MST

Funnel

A funnel north of Carlsbad was reported by a cooperative observer.

NEW YORK, Central

Franklin County							
Malone	04	2045EST	0	0	3	3	Thunderstorm Wind
Ft. Covington	04	2051EST	0	0	3 5	0	Lightning
Clinton County							
Cadyville	04	2230EST	2	1	5	0	Lightning
Cortland County							
Cortlandville *	04	2315EST-					
		2340EST	0	0	2	2	Thunderstorm Wind
Freetown	04	2315EST-		-	-	_	,
		2340EST	0	0	2	0	Thunderstorm Wind
Homer	04	2315EST-	_	•	_	_	
		2340EST	0	0	2	0	Thunderstorm Wind
Oneida County			_	•		•	
Lee Center	05	0001EST	0	0	3	0	Thunderstorm Wind
Lee	05	0001EST	Ŏ	Ŏ	2		Thunderstorm Wind
Deansboro	05	0001EST	Ŏ	Ŏ	2 2 4 3	2 1 2 3	Thunderstorm Wind
Rome	05	0001EST	Ŏ	Ŏ	4	Ž	Thunderstorm Wind
Yorkville	05	0001EST	Ŏ	Ŏ	3	3	Thunderstorm Wind
Saratoga County			•	•	_	•	111111111111111111111111111111111111111
Clifton Park	05	0045EST	0	0	3	2	Thunderstorm Wind
Montgomery County			-	•	-	_	
St. Johnsville	05	0217EST	0	0	2	2	Thunderstorm Wind
Saratoga County			•	•	_	.=	111111111111111111111111111111111111111
Galway Lake	05	0222EST	0	0	5	0	Lightning
Albany County	V	OZIDZEO I	•	•		•	- Salaring
Coeymans	05	0230EST	0	0	1	1	Thunderstorm Wind
COOJ MANIE			•	•	-	-	A MARIOUS COMMISSION OF THE CO

Lightning killed two persons when a bolt struck a house starting a fire. Trees, tree limbs, and power lines were downed by strong gusty winds. Rain, which accompanied the thunderstorms, also penetrated a major telephone trunk line and knocked out phone service to nearly 500 phones in the city of Albany. (M58O, F47O)

Ulster County Cornwall

12 0725EST

0 5 4 0 Fog

Dense morning fog reduced visibility on Storm King Mountain. This reduction in visibility was listed by local police as the cause of a three-vehicle accident.

JULY 1990

		TIME			NO. PER	OF SONS	EST IN	AATED AGE	
PLACE	DAG-E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K	OHWCL &	√- 00m00,000	WTOOO	CHARACTER OF Storm

NEW YORK, Central Cont'd

Saratoga	County
Saratog	a Springs

17 1619EST

0 0 4 0 Lightning

Lightning hit a power transformer resulting in power being knocked out to 1,300 city homes.

Otsego county Pittsfield	20	1410EST-					
Piusiieiu	20	1420EST	. 0	1	4	2	Thunderstorm Wind
Cooperstown	20	1410EST- 1420EST	0	0	2	0	Thunderstorm Wind
New Lisbon	20	1410EST-		v	2	U	
Dutchess County		1420EST	0	0	1	2	Thunderstorm Wind
Dutchess County North Section Ulster County	20	1752EST	0	0	2	0	Thunderstorm Wind
Newburgh	20	1800EST	0	0	4	3	Thunderstorm Wind

In Pittsfield, a tree fell in front of a car on County Route 80. As the tree fell it took down several (live) power lines which trapped a male driver in the car. While attempting to rescue the driver a second male received a slight shock. The injured male was treated and released from a local hospital. Elsewhere, thunderstorm winds blew down trees, large tree limbs, and power lines.

Oneida County Verona to Rome AFB to Holland Patent

23 1015EST-1023EST

17 75 0 0 4 2

A tornado struck Oneida County. The tornado was intermittent with a total path length of 17 miles. The initial touchdown in Verona was rated as an F0. The tornado next touched down near Griffiss AFB. Again the tornado was rated an F0. The final segment of the tornado occurred near the community of Holland Patent; here the tornado destroyed a school garage and a private home. Damage along this segment was rated as an F2. Path width remained fairly constant during the tornado's life, at between 50 and 75 yards.

Ulster County Phoenicia

31 1319EST

0 0 4 0

Lightning

Tornado (F2)

A lightning strike hit a power line near the Mt. Pleasent Lodge in Phoenicia. The resulting surge started a fire in the lodge.

NEW YORK, Coastal

Kings County Nassau County Kings County Suffolk County North Fork Area	09 09 09 09	1600EST 1608EST 1630EST 1730EST		0 0 0	0 0 0	???	0 0 0 0	Thunderstorm Wind Thunderstorm Wind Thunderstorm Wind Thunderstorm Wind
--	----------------------	--	--	-------------	-------------	-----	------------------	--

A squall line developed in a very warm and unstable air mass ahead of a cold front moving southeastward across New England. Many damaging thunderstorms formed along this squall line during the mid- and late-aftermon hours downing numerous trees and power lines across sections of Brooklyn and Long Island. These storms also produced some locally heavy rains that caused some brief flooding of streets and highways.

NEW YORK, Western

Orleans County Albion	04	2100EST	. 0	0	3	0	Thunderstorm Wind
Monroe County East Pittsford	04	2115EST	0	0	3	0	Thunderstorm Wind

JULY 1990

		TIME			NO.	OF SONS	ESTIN DAMA	ATED]
PLACE	D &	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	משרו	OHING C. 20	√ -∞m00∞0	CORODA	CHARACTER OF STORM	
NEW YORK, W	este	rn Cont'd								
Wayne County Wolcott Sodus Ontoic County	04 04	2120EST 2120EST			0	0	3 3 .	0	Thunderstorm W Thunderstorm W	
Ontario County Canandaigua	04	2145EST			0	0	3	0	Thunderstorm W	'ind
Monroe County East Pittsford	04	2220EST			0	0	3	0	Thunderstorm W	'ind
Wayne County Ontario Red Creek Ontario County	04 04	2225EST 2225EST			0	0	3	0 0	Thunderstorm W Thunderstorm W	
Canandaigua	04	2230EST			0	0	3	0	Thunderstorm W	ind
Seneca County Seneca Falls Wyoming County	04	2230EST			0	0	3	0	Thunderstorm W	'ind
Wyoming County Middlebury Country	04	2239EST			0	0	3	0	Thunderstorm W	ind
Cayuga County Weedsport	04	2245EST			0	0	3	0	Thunderstorm W	ind
Wyoming County Warsaw	04	2255EST			0	0	3	. 0	Thunderstorm W	ind
Livingston County Geneseo	04	2255EST			0	0	3	0	Thunderstorm W	ind
Tompkins County Groton	04	2310EST			0	0	3	0	Thunderstorm W	ind
Onondaga County Skaneateles	04	2315EST			0	0	3	0	Thunderstorm W	ind
Chautauqua County N. Harmony Lakewood Busti	05 05 05	0000EST 0015EST 0020EST			0	0 0 0	3 3 3	0 0 0	Thunderstorm W Thunderstorm W Thunderstorm W	ind
	and thu	trong cold f early mon	rning hou which dov	rs of the	4th and	and : power	5th. · lines.	The fi Fallin	I New York during ront was accompage trees and limbs of house fires.	the late evening
Steuben County Coopers Plains Chemung County	19	1510EST			0	0 -	3	0	Thunderstorm W	ind
Erin Catlin	19 19	1537EST 1537EST			0	0 0	3 3	0	Thunderstorm W Thunderstorm W	
	Thu sou	inderstorms thern tier.	developed The thunde	in warm, u erstorms do	instal owne	ble air d trees	during s and v	g the aft vires re	ternoon over portionsulting in scattered	ns of the central- power outages.
Cayuga County Montezuma Port Byron Chemung County	20 20	1105EST 1058EST			0	0	2 3	0	Hail (1.75) Thunderstorm W	ind
Elmira Big Flats Coombs	20 20 20	1415EST 1415EST 1415EST			0 0 0	0 0 0 .	3 3 3	0 0 0	Thunderstorm W Thunderstorm W Thunderstorm W	ind
	Thu dov	inderstorms vned trees a	developed nd power l	l in warm, lines. Gol	uns f ball	table l-size	air ah hail fe	ead of ll in M	a cold front. The ontezuma.	e thunderstorms
Niagara County Lockport Lockport	29 29	1615EST 1635EST			0	0	3	0	Thunderstorm W Thunderstorm W	
	Thu pov	inderstorms ver lines. S	developed ome locali	during the zed draina	e aft ge flo	ernoo: ooding	n hour g was i	s. The	e thunderstorms do I from the heavy d	owned trees and ownpours.

JULY 1990

		TIME			NO. PER	OF SONS	EST II	MATED AGE	
PLACE	DAG	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	ארט שים		4-00m00x	COCOCA	CHARACTER OF Storm

NORTH CAROLINA

Gaston County Dallas	01	1445EST	0	0	0	0	Hail (1.75)
Guilford County Greensboro	01	1458EST	0	0	0	0	Hail (1.75)
Gaston County Mt. Holly Mecklenburg County	01	1500EST	0	0	0	0	Thunderstorm Wind
Charlotte	01	1510EST	0	0	0	0	Hail (0.75)
Guilford County Southern	01	1515EST	0	0	0	0	Thunderstorm Wind
Chatham County Pittsboro	01	1525EST	0	0	4	0	Hail (1.75)
Harnett County Northern	01	1540EST	0	0	0	0	Hail (0.75)
Wake County Southern	01	1540EST	0	0	0	0	Hail
Lee County Northeast	01	1555EST	0	0	0	0	Hail (0.75)
Harnett County Lillington	01	1620EST	0 .	0	0	0	Thunderstorm Wind
Union County New Salem	01	1642EST	0	0	0	0	Thunderstorm Wind
Wake County Wake Forest	01	1645EST	0	0	0 .	0	Hail (2.50)
Granville County Butner	01	1700EST	0	0	4	?	Hail (2.25)

July 1st was the most active weather day of the month. During the early afternoon severe thunderstorms produced widespread large hail over the piedmont. Tennis ball-size hail fell near Wake Forest and at Butner damaging cars and destroying crops. Golf ball-size hail fell in Gaston, Guilford, and Chatham counties. Thunderstorm winds blew down trees and power lines in Mount Holly and Cramerton in Gaston County, southern Chatham County, in Lillington, and in New Salem in Union County.

Sampson County Clinton	01	1745EST	0	0	5	6	Thunderstorm Wind Hail (0.75)
Columbus County					_		
Evergreen	01	1755EST	0	0	0	0	Thunderstorm Wind
Pender County							
Rocky Point	01	1830EST	0	0	5	0	Thunderstorm Wind
Brundwick County							
Phoenix	01	1900EST	0	0	5	0	Thunderstorm Wind
Pender County							
Topsail Beach	01	1901EST	0	0	0	0	Thunderstorm Wind (G63)
New Hanover County	į			-	_	_	
Castle Hayne	01	1909EST	0	0	0	0	Thunderstorm Wind
New Hanover County		1,0,20	•	•	•	•	
Wrightsville Beach	01	1929EST	0	0	3	0	Thunderstorm Wind
Carteret County	•	1727201	•	•	•	•	I HORIOUTHOUTH VI HIG
1 W Morehead							
City	01	1938EST	0	0	0	0	Thunderstorm Wind
Beaufort County	VI.	19301231	v	v	U	U	Indiacisa in wind
5 NE Bath	Λ1	1948EST	Λ	0	0	0	Thundanton Wind
J IVE Dalli	01	1740E91	0	v	v	v	Thunderstorm Wind

Severe thundestorms continued over the southeastern part of the state into the evening hours. The thunderstorms changed characteristics and began producing more wind damage instead of large hail. In Sampson County near Clinton and Garland, thunderstorm winds blew down trees and damaged farm buildings. One grain elevator was destroyed. Dime-size hail fell in the area destroying \$750,000 in crops. In Pender County buildings were damaged in Rocky Point. Sixty-three mph winds were reported at Topsail Beach. At Wrightsville Beach the roof was blown off

JULY 1990

		TIME			NO. PER	OF SONS	EST IN	ATED GE	
PLACE	DA	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	D F	CHISCLE 1		WTOOR	CHARACTER OF STORM

NORTH CAROLINA Cont'd

an old house. In the town of Phoenix in Brunswick County thunderstorm winds destroyed 12 mobile homes and damaged 4 others. Elsewhere across the area trees and power lines were blown down near Morehead City, Bath, and Evergreen.

Bladen County 3 E Lisbon

01 1815EST 0.2 30 0 0 5 ? Tornado (F2)

A small but powerful tornado touched down about 3 miles east of Lisbon in Bladen County. The tornado was moving to the southeast and remained on the ground for about a half-mile. Trees were snapped off and uprooted along the path. The roof was blown off a house and a mobile home was damaged. Bricks from the house were carried about a quarter mile and smashed through the mobile home.

Gates County							
Sunbury and	Λ1	1520ECT	0	0	^	9	II-:1 (1 75)
White Oak Hertford County	01	1530EST	U	U	0	?	Hail (1.75)
Near Union	01	1545EST	0	0	?	?	Hail (1.75)
Gates County	01	13431231	U	0		•	1144 (1.73)
3 NW Gatesville	01	1702EST	0	0	0	0	Thunderstorm Wind.
Nash County	••	1,40202	•	•	•	•	The state of the s
Rocky Mount	01	1730EST	0	0	0	0	Thunderstorm Wind
Rocky Mount Eddgecombe County							
Near Rocky Mount	01	1806EST	0	0	0	0	Thunderstorm Wind
Dare County		· <u></u>				_	
Hatteras Village	01	2000EST	0	0	0	0	Hail (1.00)
Wilson County			_				
5 SW Wilson	01	2000EST	0	0	0	0	Funnel Cloud
Wilson County	^1	ACCOPTON	^	^	^	Α.	FPH 1 4 337' 1
SW of Wilson	01	2000EST	0	0	0	0 .	Thunderstorm Wind
Dare County	Λ1	2015ECT	0	0	Λ	0	Thursdomtorn Wind (C62)
Hatteras Inlet	01	2015EST	U	U	0	U	Thunderstorm Wind (G63)
Northamptom County Northeast	01	2030EST	0	0	0	0	Ueil (1.75)
Nash County	O1	2030(231	U	U	U	U	Hail (1.75)
Middlesex	01	2040EST	0	0	0	0	Thunderstorm Wind
Wilson County	VΙ	20401231	v	v	U	v	I hunderstorm which
Wilson	01	2050EST	0	0	0	0	Thunderstorm Wind
Nash County	•	200 020 1	•	•	•	•	· · · · · · · · · · · · · · · · · · ·
Southern	01	2050EST	0	.0	4	0	Thunderstorm Wind
Hyde County			_	_	-		
West of		,					
Swan Quarter	01	2100EST	0	0	0	0	Thunderstorm Wind
•							

In northeastern North Carolina midafternoon thunderstorms began producing large hail. Golf ball-size hail fell in Gates, Northampton, and Hertford counties. By late afternoon the thunderstorms were producing more wind than hail. Widespread damage to trees and power lines occurred in Wilson and in Rocky Mount. Trees were also blown down in Middlesex, Swan Quarter, and Gatesville. The Coast Guard at Hatteras Inlet reported a gust to 63 knots.

Tyrrell County Northern

01 1600EST 4 0 0 0

A large thunderstorm crossed the Albemarle Sound moving to the southeast at about 30 mph. As the storm approached the south shore of the sound in northern Tyrrell County the winds produced a strong current and a surge of high water. Twenty to 30 people were swimming in the shallow water of the area. Most people made it to safety but four young men who were about 100 yards from shore (still in shallow water) were drowned.

Thunderstorm Wind

									· · · · · · · · · · · · · · · · · · ·	JULY 1990
		TIME			NO. PER	OF SONS	EST IN	AATED AGE		0007 1770
PLACE	D-0-ш	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	אייייישהט	CHICACLE !		woown	CHARACTER OF STORM	
NORTH CAROL	INA	Cont'd								
Mecklenburg County Charlotte	02	1530EST			0	0	4	0	Thunderstorm Wi	nd
	Thu by	inderstorm a falling tre	winds bleve.	w down tre	ees ar	nd por	wer lin	es in (Charlotte. One house	e was damaged
Craven County	۸c	10200000			^	^	^	۸	Heil (1.75)	
Cove City Bertie County	06	1920EST			0	0	0	0	Hail (1.75) Thunderstorm Wir	
Roxobel	06 C-1	2220EST	L 11	Carra Cita	О . т.		•	_		IKG
Q.1 Q	GOI	ir bali-size	naii ieii in	Cove City	/. 11	ees w	ere dic	own ac	own near Roxobel.	
Cabarrus County Mount Pleasant	08	1838EST			0	0	0	0	Hail (1.00)	
Scotland County Laurinburg	08	1920EST	0	0	0	0	Thunderstorm Win	nd		
Robeson County 1 S Maxton	08	1950EST			0	0	0	0	Thunderstorm Wir	nd
	Tre	es and pov	ver lines y	were blow	n dov	vn by	y stron	g thur	nderstorms in Laurin	burg and near
Maddada Carata	ма	xton. One-i	ncn-size n	an ien in i	woun	it Pie	asant.			
Mecklenburg County Charlotte	10	1710EST			0	0	0	0	Hail (1.00)	
Durham County Northern Alamance County	10 10	1730EST 1800EST			0	0	0	0	Thunderstorm Win Thunderstorm Win	
Rockingham County Madison	10	1815EST			0	0	0	0	Thunderstorm Wi	ad
	Thu Ala	understorm mance cour	winds ble nties, and	ew down in Madisor	trees 1. O	and ne-inc	power h-size	lines hail fe	in northern Durham ell in Charlotte.	and northern
Orange County Chapel Hill	11	1700EST	•		0	0	0	0	Thunderstorm Wi	ad
Durham County Durham	11	1700EST			0	0	0	0	Thunderstorm Wir	nd
Granville County Creedmore	11	1743EST			0	0	4	0	Thunderstorm Wi	nd
Johnston County 4 E Smithfield	11	1820EST			0	0	0	0	Thunderstorm Wi	nd
Franklin County Kerney & Ingleside	11	1845EST			0	0	0	0	Thunderstorm Wi	nd
Granville County N of Creedmore Guilford County	11	1850EST			0	0	0	0	Thunderstorm Win	nd
Western Edgecombe County	11	1930EST			0	0	0	0	Thunderstorm Win	nd

Thunderstorm winds blew down trees and power lines in Chapel Hill, Durham, and near Smithfield, in western Guilford County; also Pine Tops and between Kerney and Ingleside in Franklin County. The greatest damage seemed to be in Granville County near Creedmore where numerous farm buildings were destroyed, trees were blown down, and a plate glass window was blown out of a storefront.

0

0

0

Wilson County Wilson

Edgecombe County Pine Tops

12 1945EST

11 2000EST

0 0 Hail (1.25)

Thunderstorm Wind

Half-dollar-size hail fell in Wilson.

JULY 1990

		TIME			PER	SONS	EST!	MATED AGE	
PLACE	D	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	Contraction (Contraction)			COCOEN	CHARACTER OF STORM

NORTH CAROLINA Cont'd

Lincoln County 16 E Lincolnton	13	1925EST	0	0	0	0	Thunderstorm Wind
Pamilaa County	Thu	inderstorm winds blew down tree	es 16	miles	east of	Linco	olnton.
Pamilco County Pamlico Sound Page County	16	1411EST	0	0	0	0	Waterspout
Beaufort County Near Indian Island	16	1530EST	0	0	0	0	Waterspout
Hyde County Pamlico Sound	16	1545EST	0	0	0	0	Waterspout

Waterspouts were sighted over numerous coastal locations in North Carolina. In the central part of the Pamlico Sound three were sighted between 1400 and 1600 EST. Two were sighted near Indian Island and one between Swan Quarter and Ocracoke Island.

Dare County South of Wanchese	21 A v	1255EST vaterspout was sighted jus	0 t south of \	0 Wanch	0 iese.	0	Waterspout
Wilson County West of Wilson Johnston County	27	1835EST	0	0	0	0	Funnel Cloud
Four Oaks	27	1930EST	0	0	0	0	Funnel Cloud
Johnston County Benson	27	2003EST	0	0	0	0	Funnel Cloud

A funnel cloud was sighted southwest of Wilson by the Wilson Police. Two were sighted by law enforcement officers in Johnston County, one near Four Oaks and one near Benson. No damage or large hail was reported.

NORTH DAKOTA

Divide County Colgan	02 0200CST		0	0	4	4	Thunderstorm Wind
v	Winds damaged afternoon and cau	roofs. A second sed greater damag	l seve	ere thi	unders	torm	occurred in Colgan the following
Divide County Alkabo Colgan Fortuna Fortuna Crosby 8 W Wildrose	02 1355CST 02 1400CST 02 1410CST 02 1431CST 02 1445CST 02 1521CST	0.1 20	0 0 0 0	0 0 0 0	4 5 4 4 5	0 5 4 4 0	Thunderstorm Wind (G59) Tornado (F1) Thunderstorm Wind (G52) Thunderstorm Wind (G52) Thunderstorm Wind Funnel Clouds
Burke County Powers Lake Bowbells	02 1615CST 02 1648CST		0	0	4	4 0	Hail (2.00) Thunderstorm Wind G56)

A supercell storm formed along the Canadian border at the corners of Montana and North Dakota. The storm produced widespread high winds, heavy rains, and instense hail fall; also a few tornadoes over Divide and Burke counties.

The winds destroyed farm buildings, road signs, trailers, and campers. In the town of Crosby the winds moved a bleacher section 10 feet.

Up to 4 inches of rain in an hour flooded roads and highways, while intense hail fall combined with wind and rain to damage crops.

JULY 1990

		TIME			NO. PER	OF SONS	EST II	AGE	
PLACE	D-O-E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	Come 1 - ch	- N-JORHO	o.æOo.u.oo-≻	ODCODU	CHARACTER OF STORM

NORTH DAKOTA Cont'd

A tornado uprooted trees and destroyed farm buildings in Colgan. Heavy rains and hail also occurred with this tornadic storm.

Two funnel clouds were sighted 8 miles west of Wildrose.

The supercell storm then moved southeastward into Ward County.

Ward County									
5 W Kenaston	02	1710CST			0	0	5	5	Hail (1.75)
Coulee	02	1735CST		,	0	0	- 5	5	Hail (2.75)
8 S Kenmare	02	1810CST			0	0	5	5	Hail (1.75)
15 NW Minot	02	1825CST	** 50	10	0	0	4	0	Tornado (F0)
Foxholm	02	1829CST			0	0	4	4	Hail (1.00)
Foxholm	02	1846CST			0	0	5	0	Thunderstorm Wind
Minot	02	1851CST			0	0	5	4	Hail (1.75)
Burlington	02		** 50	10	0	0	4	0	Tornado (F0)
2 S Minot	02		** 50	10	0	0	4	0	Tornado (F0)
Berthold	02	1915CST			0	0	5	5	Hail (2.75)
15 NE Ryder	02	1954CST							Funnel Cloud
3 E Ryder	02		** 50	10	0	0	4	0	Tornado (F0)
Ryder	02	1959CST			0	0	5	5	Hail (2.75)
8 N Max	02	2006CST							Funnèl Cloud

Funnel clouds and small tornadoes were sighted throughout Ward County the evening of July 2nd. Hail, high winds, and heavy rains up to 3 inches, also occurred with this supercell storm.

The winds downed trees and power lines, snapped utility poles, destroyed trailers, grain elevators, and other outbuildings.

The rains flooded streets and underpasses in the city of Minot. Hail was widespread over Ward County, especially the northwestern tip of the county and caused considerable crop damage.

McLean County							
5 NE Garrison 02	2030CST		0	0	5	5	Thunderstorm Wind
Max 02	2050CST		0	0	5	5	Hail (1.75)
10 NW Turtle Lake 02	2144CST **50	10	0	0	0	0	Tornado (F0)

Winds upended power poles and downed lines northeast of Garrison. Meanwhile, a brief tornado touchdown was reported 10 miles northwest of Turtle Lake. Hail damaged crops and buildings in the Max area.

Divide County Fortuna	02	2145CST		0	0	0	0	Thunderstorm Wind (G52)
Adams County 10 NE Reeder		2305CST		0	0	4	4	Hail (1.75)
McKenzie County 5 NNW Alexander 6 SW Watford City	02	2310CST 2315CST **80	10	0	0 1	4	4 0	Thunderstorm Wind (G70) Tornado (F0)

A tornado 6 miles southwest of Watford City lifted the roof off a home and exploded its windows. One man inside the home was injured by the broken glass.

Five miles north-northwest of Alexander, winds to 81 mph uprooted trees and blew down barns and campers.

Mountrail County Parhshall	03	0030CST					Funnel Cloud
McLean County 5 SE Max	03	0100CST	0	0	4	4	Thunderstorm Wind

	т—	·		1	NO	OF	ECTIA	MATER	JULY 19	990			
		TIME			PER	OF SONS	EST IN	IGE I					
	R	LOCAL	LENGTH	WIDTH OF PATH	K	I	P	Ç	CHARACTER				
PLACE	P	STANDARD	PATH	PĂTH	E	J	ĝ	0.000	CHARACTER OF STORM				
	-		(MILES)	(YARDS)	Ē	CHICACL &	4- 00m 0000 0	Š	070				
						D							
NORTH DAKOT	'A C	Cont'd				.		, ,					
Ward County Sawyer	03	0130CST	0.2	50	0	0	5 ,	5	Tornado (F1)				
	A s The	second storm e tornado de	n moved the estroyed tw	rough War o homes,	d and dama	l McL ged o	ean co ther b	unties, uilding	bringing high winds and a tornact, and uprooted trees.	io.			
Mercer County 15 N Beulah	06	1930CST			Ó	0	5 5	5 5	Hail (2.50)	•			
		il totaled cro h the hail.	ps while w	inds uproc	0 oted to		nd flatt	ened tr	Thunderstorm Wind railers. Five inches of rain occurr	red			
Stark County													
Antelope 5 E Richardton	06 06	1930CST 1945CST			0	0 0 0	5 5 5	5 5 5	Hail (2.75) Hail (2.50)				
	w	1343(3)1			ŏ	ŏ	5	5	Thunderstorm Wind (G65)				
Renville County 7 SW Lansford	06	1955CST							Funnel Cloud				
Morton County Hebron	06	2000CST			0	0	4	4	Hail (2.50)				
	Hai	Hail broke windows and damaged crops while winds destroyed farm buildings in eastern Stark and western Morton counties.											
	and	i western ivi	orton cour	mes.									
Mercer County 5 N Beulah	06	2042CST			0	0	4	0	Thunderstorm Wind (G62)				
1 NE Hazen	06	2054CST	++50	10	0	Ŏ	4	Ō	Thunderstorm Wind				
6 N Stanton 6 N Stanton	06 06	2120CST 2120CST	**50	10	Ó	U	Ó	0	Tornado (F0) Funnel Clouds				
	Stro Me	ong winds n anwhile, sto	orth of the orm spotter	Beulah-Ha s reported	azen a three	area si funne	napped l cloud	off po	wer poles and blew over grain bin one tornado 6 miles north of Stanto	ns. on.			
Grant County 4 W Shields	07	1900CST			0	0	5	5	Hail (4.50)				
	Sof	tball-size ha	il caused	considerabl	le cro	p dar	nage.						
Sioux County 3 S Fort Yates	07	1930CST			0	0	4	4	Hail (2.50)				
Nelson County Lakota	07	2000CST			0	0	4	0	Thunderstorm Wind (G56)				
Ramsey County Southam	07	2000CST			0	0	5	5	Hail (1.75)				
	win	il damaged ids damaged	a 30-mile-l I barns and	long stretch l other out	h of o	cropla ings.	ınd in (central	and eastern Ramsey County, wh	ile			
Grand Forks County 1 E Inkster Stutemen County	07	2016CST			0	0	4	0	Thunderstorm Wind (G52)				
Stutsman County Medina	07	2107CST			0	Q	5	5	Hail (1.75)				
3 S Cleveland Montpelier	07 07	2140CST 2200CST			0	0	5 5 5	5 5 5	Hail (1.75) Hail (1.50)				
Naving-vilva	The hail damaged 900 acres of cropland.												
n	1 116	S HELL MEINE	500 200 ac	res or crop	, iailu	'							
Barnes County Litchville	07	2234CST			0	0	5 4	5	Hail (1.50) (G56)				
					0	0	4	0	Thunderstorm Wind (G56)				

							•			JULY 1990
		TIME			NO.	OF SONS	EST II	MATED AGE		
PLACE	DAG	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	Compression	CHIOSC	A-38m30.88	WTOOD	CHARACTER OF STORM	
NORTH DAKO	ΓΑ (Cont'd								•
Mountrail County Stanley	10	1540CST			0	0	4	4	Hail (1.75)	
McLean County Garrison	16	2000CST			0	0	5	5	Hail (1.00)	
	Gai	il pelted a 3 rrison. The ited structur	hail lasted	1 30 minut	- and es in	one-l some	half mi locatio	ile area ons. I	from 30 miles we caused extensive of	st of Garrison to crop damage and
Burleigh County Wilton Driscoll	16 16	2030CST 2100CST			0	0	0 4	0 4	Hail (1.00) Hail (1.75)	
Logan County 3 N Lehr	16	2330CST	1.0	50	0	2	5	5	Tornado (F1)	
	A ton	ornado dest several farn	royed a bans in the a	rn, relocat rea.	ted a	grain	bin, a	nd upro	ooted trees. Wind	damage occurred
	Tw	o people we	ere slightly	injured w	hen	they v	vere sp	orayed	with glass by a bre	aking window.
McKenzie County 5 W Watford City	26	0430CST			0	0	3	0	Thunderstorm W	rind .
	Wi	nds peeled o	off roofing	;.						
Golden Valley Coun Golva	ty 26	1555CST			0	0	4	4	Hail (1.75)	•
Billings County Medora	26	1630CST			0	0	4	4	Hail (1.75)	
Slope County Amidon	26	1640CST			0	0	4	4	Hail (1.75)	
Williams County Williston	26	1730CST			0	0	4	. 0	Thunderstorm W	'ind
	Wi:	nds blew do ver lines.	wn numero	ous trees in	the o	city of	Willis	ston. T	he falling trees kno	cked down a few
Grant County Elgin	26	1800CST			0	0	4	0	Thunderstorm W	ind
	Stre Elg		nocked ou	t windows	, dan	naged	outbui	ldings,	and broke large tre	es in the town of
Mountrail County 6 W Parshall	26	1830CST			0	0	4	0	Thunderstorm W	ind
·		gh winds at lins.	Parshall B	ay overtur	ned l	oats a	and tra	ilers aı	nd damaged	·
Renville County 3 E Sherwood	26	1930CST			0	0	4	0	Thunderstorm W	ind .
•		nds lifted ro	ofs and ca	used other	r dam	age to	o farm	buildii		
ОНЮ						-				
Fairfield County Lancaster	05	1143EST			0	0	4	0	Thunderstorm W	ind

JULY 1990

		TIME			NO. PER	OF SONS	ESTII DAM/	MATED AGE		JUL	Y 1990
PLACE	D40-E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	Comp. T. A.	OmizeC. 25-1		CECOEN	CHARACTER OF STORM		
OHIO Cont'd						•					
Guernsey County 5 SW Cambridge	05	1250EST			0	0	4	0	Thunderstorm Wi	nd	
Noble County Batesville	05	1300EST			0	0	4	0	Thunderstorm Wi		
Datesville		inderstorms	hlew dow	m trees and	-		-	Ü	i nuirazatini Wi	IN.	
Hocking County	1110	m c orstorms	DICH GON	n troos and	a pov	VOI III	100.				
Logan Clermont County	05	1730EST			0	0	4	0	Thunderstorm Wi	nd	
Goshen Township Miami Township	05	1730EST- 1820EST			0	0	4	0	Thunderstorm Wi	nd	
Highland County Dodsonville	05	1820EST	-		0	0	?	0	Hail (0.75)		
Athens County 2 S Athens	05	1835EST			0	0	4	0	Thunderstorm Wi	nd	
Brown County Mt. Orab	05	1844EST			0	0	4	0	Thunderstorm Wi	nd	
Meigs County Countywide	05	1855EST			0	0	4	0	Thunderstorm Wi	nd	
Hocking County Geiger Road	05	1914EST			0	0	4	0	Thunderstorm Wi	nd	
Jackson County Jackson Township	05	1915EST			0	0	5	0	Thunderstorm Wi	nd	
Washington Township		1915EST			0	0	4	?	Hail (1.50)		
Ross County Possum Hollow	٥٤	1020E0T			^	^		•	77% 1 A 377*		
Road Adams County	05	1930EST			0	0	4	0	Thunderstorm Wi		
Countywide	05	2000EST			0	0	4 ?	0	Thunderstorm Wi Hail (0.75)	nd	
Highland County Mowrystown	05	2036EST			1	0	0	0	Lightning		
	larg	e hail. A t	oarn lost it	s roof and	outb	uildin	igs we	re dest	trees and power line royed in Adams Cou ront yard. (M390)	inty. On	é man
Vinton County Harrison Township Richland Township	05 06	1930EST- 0100EST			0	?	5	4	Flash Flood		
McArthur	05 06	2000EST- 0100EST			0	0	4	4	Urban and Small Stream Flooding		
Jackson County Jackson Wellston Collin County	05 06	2000EST- 0100EST			0	0	4	4	Urban & Small Stream Flooding		,
Gallia County Rio Grande	05 06	2000EST- 0100EST			0	0	4	4	Urban & Small Stream Flooding		
	Flac	h floode w	school out r	narte of Do	nites (671 3	2/0 01	A 50	and many county ro	ade and h	ridase

Flash floods washed out parts of Routes 671, 349, and 50, and many county roads and bridges in western Vinton County as an estimated 5 to 8 inches of rain fell between 1900 and 2200 EST. Route 671 was so severely damaged that it could not be reopened until July 12th. Many homes were damaged along Salt and Racoon Creeks in Harrison and Richland Townships. One mobile home was swept nearly a mile downstream. The family of four in the mobile home spent the night in trees as the water rose. The cities of Jackson, Wellston, Rio Grande, and McArthur experienced small stream and urban flooding. Many homes were damaged in these towns due to basement flooding.

JULY 1990

		TIME			NO.	OF SONS	ESTIN DAMA	IATED IGE	
PLACE	D=0-E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	Conser A	CHOOC E	4- 00 m00200	WDOWN	CHARACTER OF STORM
OHIO Cont'd									
Richland County Mansfield Airport	09	1133EST			0	0	5	0	Thunderstorm Wind
Ashland County Loudonville	09	1205EST			0	0	4	0	Thunderstorm Wind
Holmes County Mt. Hope	09	1225EST			0	0	4	0	Thunderstorm Wind
Mercer County 2 SE Celina	09	1245EST			0	0	5	0	Thunderstorm Wind
Coshocton County Tiverton Center	09	1315EST			0	0	4	0	Thunderstorm Wind
Darke County 1 E Greenville	09	1341EST			0	0	4	0	Thunderstorm Wind
Licking County Summit Station	09	1425EST			0	0	4	0	Thunderstorm Wind
Delaware County Delaware	09	1430EST			0	0	4	0	Thunderstorm Wind
Union County Plain City	09	1430EST			0	0	4	0	Thunderstorm Wind
Madison County Summerford	09	1436EST						^	791 . 1 337' 1
London Licking County Pataskala Granville	09	1440EST			0	0	4 5	0	Thunderstorm Wind Thunderstorm Wind
Newark Muskingum County									
1 SW Zanesville Franklin County	09	1440EST			0	0	4	0	Thunderstorm Wind
Columbus Montgomery County	09	1500EST			0	0	4	0	Thunderstorm Wind
_Englewood	09	1500EST			0	0	4	0	Thunderstorm Wind
Greene County Countywide	09	1530EST			0	0	4	0	Thunderstorm Wind
Franklin County Westerville	09	1540EST			0	0	4	0	Thunderstorm Wind
Fairfield County Baltimore	09	1600EST			0	0	4	0	Thunderstorm Wind
Pickaway County Ashville	09	1615EST			0	0	4	0	Thunderstorm Wind
Hocking County Lauralville	09	1630EST			0	0	5	0	Thunderstorm Wind
Washington County Beverly	09	1700EST			0	0	4	0	Thunderstorm Wind
Greene County 5 E Xenia	09	1720EST			0	4	0		Thunderstorm Wind
Crawford County 1 W Crestline	09	1725EST			0	0	4	0	Thunderstorm Wind
Harrison County Jewett	09	1730EST			1	0	0	0	Lightning
Richland County Clearfork Lake	09	1730EST			0	0	4	0	Thunderstorm Wind
Clark County Springfield	09	1720EST							Urban and Small Stream Flooding
Springfield Preble County		1740EST			0	0	4	0	Thunderstorm Wind
Gratis Lewisburg	09	1755EST			0	0	4	0	Thunderstorm Wind
Montgomery County Dayton	09	1815EST			0	0	4	0	Urban and Small Stream Flooding

·		TIME			NO.	OF SONS	ESTI	MATED AGE		ULY 1990
PLACE	DAO-E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	F.	- NOTE OF THE PERSON OF THE PE	V-000 mpo->	COCOCA	CHARACTER OF Storm	
OHIO Cont'd										
Morrow County Northern Part										
of County Warren County	09	1815EST			0	0	4	0	Thunderstorm Wind	
2 N Franklin Greene County	09	1815EST	•		0	0	4	0	Thunderstorm Wind	
Cedarville	09	1825EST			0	0	4	0	Urban and Small Stream Flooding	
4 NW Jamestown Athens County		1835EST			0	0	4	0	Thunderstorm Wind	
3 SW Athens Clinton County	09	1845EST			0	0	4	0	Thunderstorm Wind	
Wilmington Warren County	09	1900EST			0	0	4	0	Thunderstorm Wind	
2 SE Lebanon Clermont County	09	1900EST			0	0	4	0	Thunderstorm Wind	
2 W Batavia Goshen	09	1950EST			0	0	4	0	Thunderstorm Wind	
Montgomery County Ketering	09	2000EST			0	0	4	0	Thunderstorm Wind	
	man and 4 ai in S pov alor	ny areas. W took the ro- ircraft at the Summit Stati	ands guste of off the f Lakefield ion, Summere blown southwest	d to 64 mp Trehouse. Airport o Perford, and	h at t Wind n Ro d the	he Ma Is in e ute 21 Sharo	nsfield xcess of 9 sout n Woo	l-Lahm of 70 m heast cods sub	wing down trees and power Airport which damaged 5 apph destroyed a hangar and of Celina. Winds gusted to divison of Columbus. High mestown and a barn was don while riding a tractor near	damaged 60 mph
Knox County 3 N Fredericktown	09	1830EST	1.0	50	0	0	4	0	Tornado (F0)	
	A to		hed down 1	briefly 3 m	iles r	orth (of Fred	lerickto	own and blew down trees an	d power
Adams County Winchester Locus Grove	10 10	1530EST 1530EST			0	0	5 4	0	Thunderstorm Wind Hail (1.50)	•
Pickaway County Circleville	10	1720EST			0	0	4	0	Thunderstorm Wind	
Hocking County Laurelville	10	1730EST			0	0	5 .	0	Thunderstorm Wind	
Ross County Adelphi	10	1730EST			0	0	4	0	Thunderstorm Wind	
	A h	en house w	as destroy nd a grain	ed and a h	ouse	lost it	s roof	in Wi	rees and power lines in mar nchester. Golf ball-size ha Buildings were also dan	il fell in
Washington County Marietta	10	2235EST			0	0	4 6	0	Thunderstorm Wind Lightning	
	con	inderstorms ipany and d lion.	blew dow lestroyed r	n trees and numerous h	d pov nigh t	ver lir techno	nes in ologica	Mariet l circu	ta. Lightning struck the te its which were valued at n	elephone early \$1
Clermont County Williamsburg	11	1520EST			0	0	4	0	Thunderstorm Wind	

									JU	LY 1990
		TIME	!		NO.	OF SONS	ESTIM DAMA	ATED		
PLACE	DAO-E	LOCAL STANDARD	LENGTH WIDTH OF PATH PATH (MILES) (YARDS)		K-1-M	CMOCLE		CECOEN	CHARACTER OF STORM	
OHIO Cont'd							•			
Warren County Morrow Brown County Aberdeen	11	1525EST			0	0	4	0	Thunderstorm Wind	
2 S Georgetown	11	1540EST			0	0	4	0	Thunderstorm Wind	
leigs County 5 E Burlingham	11	1550EST			0	0	4	0	Thunderstorm Wind Hail (2.00)	
	Thu east	inderstorms t of Burling	blew down	n trees and	powe	er line	es in ma	ıny are	eas. Large hail fell along Ro	ute 681
0HZ004-007-011 Central Highlands	11	2300EST- 1200EST			0	0	5	4	Urban and Small Stream Flooding	
Miami Valley	12	0500EST- 1200EST			0	0	5	4	Urban and Small Stream Flooding	
Northeast Inland	12	0730EST- 2300EST			0	0	6	5	Urban and Small Stream Flooding	
Central	12	0900EST- 2200EST			0	0	6	5	Urban and Small Stream Flooding	
East Central	12	0900EST- 2300EST			0	0	6	5	Urban and Small Stream Flooding	
	Flocen hou hun syst cov in J	oding that be trained in rainfall reducted in rainf	began during Rainfall to be be cord for the cord for the cord for the cord thousand thousand the cord due to the cord for	ng the eventals were fine month of the all ds of homer 1,000 per constructions.	ning or rom 3 of Jululation less are cople and comments are comments and comments and comments and comments are comments and comments and comments are comments and comments and comments are comments and comments are comments and comments are comments and comments are comments and comments and comments are comments and comments are comments and comments are comments and comments are comments and comments are comments and comments are comments and comments are comments and comments are comments and comments are comments and comments are comments and comments are comments and comments are comments and comments are comments and comments are comments and comments are comments and comments are comments and comments are comments and comments are comments are comments and comments are comments and comments are comments and comments are comments are comments are comments and comments are comments are comments are comments are comments and comments are comments are comments are comments are comments are comments are comments are comments are comments are comments are comments.	of the to no ly with 24-hid bu were reeks	11th cearly 6 th 4.54 nour rai sinesse evacua overfle	ontinu inches inche nfall r s, and ted in owing	ed through the 12th across n in many areas. Dayton set s of rain. This was only twecord. Streams, creeks, and large expanses of farmlan Dillonville, Newtown, and in those areas.	nuch of the 24- vo one- i sewer d were Adena,
Licking County Newark	12	1500EST- 2200EST			0	0	4	0	Flood	
Pickaway County Circleville	13 16	1300EST- 1500EST			0	0	4	0	Flood	
ike County Piketon	14 17	1000EST- 0500EST			0	0	4	4	Flood	
	The Thi	Licking Ri s was nearlisted at 17.6	y 1.50 feet 0 feet at 20	t above flo 000 EST o	od sta n the	ige. 14th.	The Sc This	ioto R was 1.	18.40 feet at 1900 EST on the iver at Piketon went into floof of feet above flood stage. A 6.70 feet at 2030 EST on the	od and Also, at

Circleville, the Scioto River went into flood and crested at 16.70 feet at 2030 EST on the 15th. This was almost 3 feet above the 14-foot flood stage.

Jefferson County Mahoning County Trumbull County Columbiana County

2000EST-1500EST

? Urban and Small Stream Flooding

Rainfall of 3 to 5 inches fell onto already saturated soils over extreme eastern Ohio causing many streams, rivers, and creeks to flood. Thousands of homes and businesses, and many acres of farmland were flooded. Evacuations took place along Wills Creek near Steubenville, in Brillant and New Alexandria in Jefferson County, and in Lisbon in Columbiana County. Many roads were flooded and some washouts occurred in these areas. A mud slide closed Route 289 in Lowelville in Mahoning County. Estimates of damage were in the millions, with Jefferson County leading the way with nearly \$3 million in damage.

JULY 1990

		TIME			NO. PER	OF SONS	EST 1)	MATED NGE	
PLACE	DA)	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	KL-WO	Office Control	«-сатъ Ожъ	COCOLIO	CHARACTER OF STORM

OHIO Cont'd

Mahoning County Youngstown

15 0245EST-0700EST

0 0 4 0 Flood

The Mahoning River at Youngstown went into flood and crested at 10.50 feet at 0500 EST. This was half a foot above flood stage.

Cuyahoga County
Warrensville Hghts 19
Eastern One-Third 19

19 1300EST 19 1330EST-1700EST 1 0 0 0 Lightning 1 ? 5 0 Flash Flood

A thunderstorm moved very slowly through eastern Cuyohoga County dropping nearly 4 inches of rain in less than 2 hours. Flash flooding trapped vehicles in many areas and flooded basements. People had to be rescued from stranded and flooded cars. Shaker Lakes overflowed into Shaker Heights. A nine-year-old boy drowned in East Cleveland when Doan Creek flooded and swept him downstream into Lake Erie. A man was killed by lightning while working outdoors in Warrensville Heights. Lightning (M570) Flash Flood (M090).

Licking County Buckeye Lake	20	1335EST	0	0	4	0	Thunderstorm Wind
Perry County Thornville	20	1400EST	0	0	4	0	Thunderstorm Wind
Fairfield County Lancaster	20	1445EST	0	0	4	0	Thunderstorm Wind
Miami County Charleston	20	1530EST	0	0	4	0	Thunderstorm Wind
Montgomery County Dayton Airport	20	1530EST	0	5	5	0	Thunderstorm Wind
Clark County Crystal Lake	20	1543EST	0	0	?	?	Hail (0.75)
Clermont County 1 E Milford	20	1545EST	0	0	4	0	Thunderstorm Wind
Greene County 5 N Zenia	20	1600EST	0	0	4	0	Thunderstorm Wind

Thunderstorms moved through southern Ohio blowing down trees and power lines in many areas and dropping large hail. Winds gusted to 68 mph at the Dayton Airport which blew over 20 air show tents and injured five people.

Cuyahoga County Brookpark

20 2315EST-0100EST

0 0 4 0 Urban and Small Stream Flooding

0

0

4

Rainfall of over an inch per hour fell, causing roads to flood and trapping some vehicles.

Guernsey County
Quaker City

21 1500EST1700EST

0 0

Belmont County
Flushing

21 1500EST1715EST

0 0

Urban and Small Stream Flooding Urban and Small Stream Flooding

Heavy rain fell causing streets, sewer systems, and creeks in these areas to flood.

0HZ001-Northwest 22

2 0000EST-2000EST

0 6 5

4

Urban and Small Stream Flooding Urban and Small

Madison County Countywide

22 0000EST-0400EST

0 0 4

· · · · · · · · · · · · · · · · · · ·				<u> </u>	NO.	OF SONS	ESTIN	MATED	JULY 1990
	,	LOCAL	LENGTH	UIDTR	PER	SONS	<u> </u>		
PLACE	DA)—E	STANDARD	PATH (MILES)	WIDTH OF PATH (YARDS)	L L E D	C)MODC(-Z)		CEOTO	CHARACTER OF STORM
OHIO Cont'd	I				<u> </u>	I. ——.		I	
Franklin County Northern Sections OHZ010-West	22	0100EST- 0400EST			0	0	4	0	Urban and Small Stream Flooding
Central	22	0200EST- 2200EST			0	0	5	0	Urban and Small Stream Flooding
OHZ004-Northeast Inland	22 23	1200EST- 0200EST			0	0	5	4	Urban and Small Stream Flooding
	Ohi Otta cau	io received t awa, in Put sed widespr	the heavies nam Coun ead floodis	st rain with ity recorde ng of strea:	i five d 7.1 ms, c	to se 5 inc reeks,	ven inches of and r	ches co rain fo ivers.	the 22nd into the 23rd. Northwestern mmon in many areas. The City of or the most in the state. This rain Thousands of homes and businesses rithwestern Ohio.
Trumbull County Niles to Hubbard	22	1517EST- 1530EST	10.0	50	0	0	5	0	Tornado (F0)
Mahoning County 2 SE Canfield	22	1530EST	0.5	50	0	0	4	0	Tornado (F0)
Washington County 1 N Marietta to Duecher	22	1710EST- 1735EST	13.0	50	0	0	5	0	Tomado (F0)
Columbiana County New Waterford	22	1830EST	0.5	50	0	0	4	0	Tornado (F0)
Mahoning County Washingtonville	22	1900EST	2.0	50	0	0	4	0	Tornado (F0)
Columbiana County Fairfield Township	22	1910EST- 2000EST	0.5	50	0	0	4	0	Tornado (F0)
	Six small tornadoes touched down in northeastern and southeastern Ohio. These tornadoes were generated from weak rain showers and thunderstorms and only lasted a few minutes or less. The tornado which crossed Washington County was strongest, but damage was still minor. Damage occurred mainly to trees and some outbuildings. Minor structural damage occurred to some buildings in Washington and Mahoning counties.								
Lucas County Waterville	23 28	0500EST- 0500EST			0	0	?	0	Flood
Pickaway County Circleville	23	1500EST- 1900EST			0	0	0	0	Flood
Sandusky County Woodville	24 25	0000EST- 0900EST			0	0	4	0	Flood
	24t	h. This was	: 0.4 foot :	above the f	boof	stage	of 9 fe	et. Th	ted at 9.40 feet at 1300 EST on the ne Scioto River at Circleville rose to er at Woodville went into flood and arly one foot above flood stage.
Mercer County 6 W Celina	24	1830EST	0.5	25	0	0	4	0	Tornado (F0)
	A t	ornado touc	hed down	briefly we	est of	Celin	a dam	aging a	a barn.
OKLAHOMA									
Cherokee County	05	1600CST			0	0	?	?	Thunderstorm Wind (G65)
Peggs Auskogee County	08	Unknown			1	0	, 0	í O	Excessive Heat
					-	-	-	-	

JULY 1990

		TIME			NO.	OF SONS	ESTI!	MATED AGE	
PLACE	DAO E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	Kindiduo		4-88m30284	COCOD.W	CHARACTER OF STORM

OKLAHOMA Cont'd

Garfield	County
Enid	•

08 Unknown 1 0 0 Excessive Heat

A 58-year-old Muskogee man died of heat stroke. He was taken from a residential care center to the Muskogee Regional Medical Center on the evening of the 8th and died a short time later. A 65-year-old Enid man also died from the excessive heat. He was found in the back seat of a car with all windows closed. (M58O, M65V)

LeFlore County Poteau

11 1800CST 0 0 4 0 Lightning

Lightning struck a home in Poteau. The resulting fire caused extensive damage to the roof and damage was estimated at \$25,000.

Beaver County 10 WSW Beaver Beaver County 10 WSW Beaver

15 1645CST 0 0 0 ? ? Hail (1.00) 15 1645CST 0.01 20 0 0 ? ? Tornado (F0)

A thunderstorm in the eastern Oklahoma Panhandle produced a brief F0 tornado 10 miles west-southwest of Beaver. Although the tornado touched down in an open field, a section of irrigation pipe was twisted and carried 0.5 mile. Quarter-size hail and approximately 3 inches of rain accompanied the storm.

Washita County 2 SW Corn Comanche County Southeastern Portion

25 1705CST 0 0 ? ? Hail (1.75)
25 1545CST1845CST 0 0 ? ? Flash Flood

A thunderstorm in Washita County produced golf ball-size hail. Slow-moving thunderstorms in Comanche County produced localized very heavy rainfall. Television station KSWO in eastern sections of Lawton recorded eleven inches of rain from 1300 CST to 1845 CST. Some roads were flooded in southern and eastern sections of the county and street flooding was reported in Lawton. There were reports of 55 to 60 motorists stranded in the flood waters in Lawton.

Beckham County 6 SW Elk City Woods County Waynoka

28 1700CST 0 2 ? ? Thunderstorm Wind 28 1925CST 0 0 ? ? Hail (1.00)

A thunderstorm in northwestern Oklahoma produced quarter-size hail in Waynoka. Strong thunderstorm winds blew an oil derrick over onto a pick-up truck near Elk City. Two men inside the truck were injured, one critically. The strong winds destroyed a metal barn, ripped the roof off a shed, blew a diesel tank approximately 50 feet, damaged a livestock trailer, and uprooted two large trees.

OREGON

ORZ006 Umatilla County 05 2000PDT-2100PDT

0 0 ? 0 Severe Thunderstorm

Convective winds peaked at 62 mph at the Pendleton Airport. Visibilities during the thunderstorm were reduced to 1 mile in blowing dust.

ORZ007 Hood River and Wasco Counties

11 1843PDT-1942PDT

0 0 6 0 Severe Thunderstorm

Thunderstorms over eastern Oregon reached severe criteria. Winds were steady 60 mph at Foreman's Point during the storm and strong enough at The Dalles to knock down three concrete walls at a construction site.

JULY 1990

		TIME			NO. PER	OF SONS	EST II	MATED AGE	·	JULT 191
PLACE	DA	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	0 1	CHEACL &	4- com 0 0x0	COCOEN	CHARACTER OF STORM	
PENNSYLVANI	 [A,]	Eastern		L	1	<u> </u>	<u> </u>		1	

PENNSYLVAN	IA, Eastern					
Schuykill County 5 S Pottsville Freidensburg Summit Station Donaldson	05 1210EST 05 1210EST 05 1210EST 05 1210EST	0 0 0	0 0 0	3 4 ? 3	? 3 3 ?	Thunderstorm Wind (G52) Hail (1.75) Hail (1.75) Thunderstorm Wind
	mph south of Pottsville. Golf ball Summit Station areas. The hail small	l-size ashed	hail for	ell in ' at field	Wayne I. shre	Donaldson and were reported at 60 Township in the Freidensburg and dded corn, and damaged fruit crops. ed aluminim siding, and broke vinyl
Juniata County Thompsontown	05 1230EST	0	0	4	?	Thunderstorm Wind
	Thunderstorm wind gusts downed one house. Two transformers and to 2,000 residents.	trees. their	The suppo	falling rting p	trees ooles v	blocked roads and damaged at least were blown, cutting electrical power
Perry County Newport	05 1240EST	0	0	3	?	Thunderstorm Wind

Lehigh County
1 N Macungie 05 1245EST 0 0 ? ? Hail (0.75)

Thunderstorm wind gusts downed trees and utility lines in the Newport area.

Three-quarter-inch hail was reported near Macungie.

Cumberland County							
Carlisle	05	1335EST	0	0	3	?	Thunderstorm Wind (G52)
Boiling Springs	05	1340EST	0	0	3	?	Thunderstorm Wind `
Allen	05	1345EST	0	0	3	?	Thunderstorm Wind

Thunderstorm wind gusts downed hundreds of trees and also utility lines. Falling trees damaged automobiles, utility lines, and houses. Wind gusts were estimated at 50 to 60 mph in Carlisle.

Bucks County Bedminster	05	1345EST	0	0	3	?	Thunderstorm Wind Hail (1.75)
Pipersville	05	1347EST	0	0	3 4 3	; ;	Thunderstorm Wind Hail (1.75)
Point Pleasant 1 E Plumsteadville	05 05	1357EST 1357EST	. 0	0	4	?	Thunderstorm Wind Thunderstorm Wind
Carversville	05	1403EST 1405EST	0	0 0 0	3 4	?	Hail (0.75) Thunderstorm Wind
Solebury New Hope	05 05	1403EST 1410EST	0	0 0 0	5 3	?	Lightning Thunderstorm Wind Hail (1.75)

Thunderstorm wind gusts downed hundreds of trees and tree limbs from Bedminster in Bedminster Township through Plumstead and Solebury Townships to New Hope. The trees came down on houses and other buildings, roads, automobiles, and utility lines. Over 40,000 customers in the area lost electrical power. The wind gusts also took off siding and portions of roofs. Hail ranging up to golf ball-size broke many windows and dented or broke siding. A lightning-caused fire resulted in extensive damage to a \$500,000 house in Solebury.

Bucks County 1 SE Bedminster to 05	1345EST_							
New Hope	1405EST	10	300	0	0	5	?	Tornado (F1)

JULY 1990

		TIME			NO.	OF SONS	EST II	MATED AGE	
PLACE	D	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K) Line	CHINCLE	Р СОВШЕО	COCOPA	CHARACTER OF STORM

PENNSYLVANIA, Eastern Cont'd

A tornado touched down at times along a long track and uprooted, snapped off, or twisted off many trees. Many tree limbs, utility lines, and poles were downed. Some of the trees and limbs came down on houses and automobiles. The tornado completely demolished one large five-story barn in Plumstead Township. A farm truck and two automobiles in the barn were smashed.

Adams	County
York	Springs

05 1400EST

0 3

Thunderstorm Wind

Thunderstorm wind gusts downed numerous trees. Trees were also down north of York Springs to near the Cumberland County line.

·???

I

05 1400EST 05 1412EST

0 0 4 0 0 3 0 0 ? 0 0 3 Thunderstorm Wind Thunderstorm Wind Hail (1.75) Thunderstorm Wind

Thunderstorm Wind

Dover 1 NW Red Lion 05 1412EST 05 1430EST

Thunderstorm wind gusts downed many trees and utility lines. The winds tore awnings and siding off mobile homes in Franklintown and trees also fell on some of the mobile homes. In York at least one tree fell on an automobile and part of the roof was ripped off a house and an apartment building. Golf ball-size hail also fell in York. A ham operator reported wind gusts of 50 to 60 mph at 1420 EST, but the exact location was never given.

Lancaster County New Providence

05 1500EST

0 0

Lightning

Lightning struck a tree in a pasture and killed 14 cows under the tree. Twelve of the cows were killed instantly and two were crippled and had to be destroyed. The cows were valued at about \$10,000.

Centre County	
Phillipsburg	
Port Matilda	
State College 2 SE Centre Hal	1
2 SE Centre Hal	1
Fillmore	

rg 09 1242EST lda 09 1245EST lege 09 1322EST tre Hall 09 1325EST 09 1325EST 0 0 3 ? T 0 0 3 ? T 0 0 3 ? T 0 0 3 ? T 0 0 3 ? T

Thunderstorm Wind Thunderstorm Wind Thunderstorm Wind Thunderstorm Wind Thunderstorm Wind

Thunderstorm wind gusts downed numerous trees. Utility lines also were downed near Fillmore and southeast of Centre Hall. The damage occurred between 1230 and 1255 EST in Phillipsburg.

Lehigh County Macungie Coopersburg

09 1345EST 09 1345EST 0 0

Hail (0.75) Hail (0.75)

Three-quarter-inch hail fell.

Mifflin County Lewistown

09 1359EST

0 0 3

?

Thunderstorm Wind

Thunderstorm wind gusts downed numerous trees in the Lewistown area.

Snyder County Beaver Springs

Beaver Springs 09 1400EST 2 E Beaver Springs 09 1400EST $\begin{array}{ccc} 0 & 0 & 3 \\ 0 & 0 & 3 \end{array}$

Thunderstorm Wind Thunderstorm Wind

Thunderstorm wind gusts downed trees and utility lines in Beaver Spring and to the east in Beaver Township between 1345 and 1415 EST.

JULY 1990

		TIME			NO.	OF SONS	EST IN	AGE	
PLACE	DAO-E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	P. C. L. C.	- N-JORGEO		COCOAN	CHARACTER OF STORM

PENNSYLVANIA, Eastern Cont'd

Carbon County 2 E Aquashicola Little Gap		1415EST 1415EST	0	0	4 ?	0	Lightning Hail (0.75)
Lattic Gap	0)	1412121	U	U	•	•	1 mi (0.73)

Three-quarter-inch hail fell at Little Gap. A lightning-caused fire destroyed a barn east of Aquashicola.

Monroe County Saylorsburg Kunkletown	1418EST 1425EST	0	0	?	?	Thunderstorm Wind (G53) Hail (0.75)

Thunderstorm wind gusts were estimated at over 60 mph in Saylorsburg and three-quarter-inch hail fell in Kunkletown.

Northampton County	,						
Northampton County 1 NW Wind Gap	09	1430EST	0	0	?	?	Thunderstorm Wind (G53)
-			0	0	?	?	Hail (1.75)
Point Philips	09	1430EST	0	0	3	?	Thunderstorm Wind
			0	0	?	?	Hail (0.75)
Easton	09	1430EST	Ŏ	Ŏ	?	Ž	Hail (0.75)
3 SE Nazareth	09	1411EST	Ŏ	Ŏ	3	Ž	Thunderstorm Wind (G53)
Nazareth	Ŏ9	1455EST	ŏ	ŏ	ž	'n	Hail (0.75)
Tatamy	Ŏ9	1455EST	ň	ŏ	ż	ż	Thunderstorm Wind
1 atamy	U	14001001	X	ŏ	ว	á	(11-:1 0.75)
			U	U	٤	ſ	(Hail 0.75)

Thunderstorm wind gusts were estimated at over 60 mph at Wind Gap and southeast of Nazareth. Large limbs and utility lines were down in Point Philips and large trees were down southeast of Nazareth, in Nazareth and in Tatamy. Golf ball-size hail was reported in Wind Gap, three-quarter-inch hail was reported in Point Phillips, Easton and Tatamy, and large hail was reported southeast of Nazareth.

Adams County							
2 NW Wenksville	09	1525EST	0	0	3	?	Thunderstorm Wind

Thunderstorm wind gusts downed trees along Route 223 near the Cumberland County line.

York County				_		_	
2 E Abbottstown	09	1525EST	0	0	3	?	Thunderstorm Wind
Delta	09	1555EST	0	0	3	?	Thunderstorm Wind
Red Lion	09	1555EST	0	0	3	?	Thunderstorm Wind

Thunderstorm wind gusts downed trees that blocked roadways in Paradise Township just across the county line from Abbottstown, Adams County. Trees and utility lines were downed in the Delta and Red Lion areas, between 1545 and 1605 EST.

Lancaster County							
Holtwood	09	1545EST	0	0	3	?	Thunderstorm Wind
Lancaster	09	1550EST	0	0	3	?	Thunderstorm Wind
4 S Lancaster	09	1550EST	Ō	Ō	3	?	Thunderstorm Wind (G56)
Lititz	09	1550EST	Ō	1	Ō	Ó	Lightning
White Horse	09	1600EST	Ō	Ō	3	?	Thunderstorm Wind
2 SW Cedar Lane	09	1600EST	Ō	0	3	?	Thunderstorm Wind

Thunderstorm wind gusts downed many trees and utility lines in Conestoga, Strasburg, Leacock, Paradise, Martic, West Lampeter, Sadsbury, Salisbury, Providence, East Earl, and Eden Townships. The communities in the headers above fairly well outline the area. In the area near Cedar Lane at least 12 trees, many of them huge, were blown down. Some of the trees blocked roads and at least two traffic lights were down. In Lititz a man received minor injuries when he was struck by lightning, blacked out, and fell off the roof he was repairing.

JULY 1990

		TIME			NO. PER	OF SONS	EST II	MATED AGE	
PLACE	D	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	Cmrry	CHURCLE -	4- 20 m2020	COCOON	CHARACTER OF STORM

PENNSYLVANIA, Eastern Cont'd

Ch	ester County
1	S Conestoga
1	S Conestoga NW Lyndell

1620EST 09 1625EST ?

Thunderstorm Wind Thunderstorm Wind (G61)

Thunderstorm wind gusts downed trees and utility lines. Many trees were down on historic Springton Manor Farm near Lyndell. One of the trees damaged a carriage house. A portion of one corn field was flattened and an apple orchard was nearly destroyed. The damage path in Wallace and Upper Uwchlan Townships near Lyndell was 5 to 6 miles long and 0.5-mile wide. Winds were estimated at 70 mph.

Montgomery County

Pottstown Norristown Conshohocken Penllyn Maple Glen

09	1625EST
09	1635EST
09	1638EST
09	1640EST
09	1645EST

0	0	4	?	Thunderstorm Wind
0	0	3	?	Thunderstorm Wind
Ō	Ō	3	Ô	Thunderstorm Wind
Ŏ	Ŏ	3	?	Thunderstorm Wind
Ō	Ŏ	4	Ò	Thunderstorm Wind

Thunderstorm wind gusts downed trees and utility lines. In Pottstown, besides the downed trees, large limbs and utility lines, roofing material was torn off the roof of an industrial plant. Some of the roofing material landed on automobiles in the parking lot causing damage. In Conshohocken a tree fell on two houses. In the Penllyn area the downed trees blocked all or portions of roads. In Maple Glen, at just one residence 14 trees were down, two fences and a deck were destroyed, and an umbrella and table were thrown into a swimming pool.

Chester County 2 E Eagle to 1.5 S Chester Springs

09 1630

5.0

0

? Tornado (F1)

A tornado uprooted or broke off many trees and downed many utility lines as it moved eastward across the county. A few of the trees came down on houses causing minor damage.

5

Centre County Phillipsburg 1 N State College

10 1230EST 10 1310EST

Thunderstorm Wind Thunderstorm Wind (G60)

Thunderstorm wind gusts uprooted, snapped off or broke off portions of 12 to 14 trees in Phillipsburg. Also a screened backstop was blown 100 feet or so at a local baseball field. Wind gusts were measured at 69 mph just to the north of State College.

Lancaster County 2 SW Elizbethtown 10

1 S New Danville

1430EST 1430EST 10

O Lightning Lightning

Lightning caused fires in a mower shop and in a house. The mower shop near Elizabethtown sustained \$250,000 damage and a house near New Danville had \$85,000 damage.

York County 3 S Wrightsville

10 1522EST

Thunderstorm Wind Hail (1.00)

Thunderstorm wind gusts in lower Windsor Township south of Wrightsville downed more than 80 trees. Many trees were 16- to 24- and up to 48-inches in diameter. Ice-cube-size hail also fell. Four automobiles were damaged by falling trees or limbs or by hail. Trees came down on garages and houses with some of them sustaining severe damage. The damaged area was about 0.5 mile and stretched for about 2 miles right along the Susquehanna River. Seven houseboats were completely capsized in marinas along the river. Eight other boats were damaged. Six sailboats on trailers were blown over at a yacht club. Total damage was estimated at \$250,000. The damage occurred between 1515 and 1530 EST.

		TIME	<u> </u>		NO. PER	OF SONS	ESTII DAM	MATED AGE		JULY 1990
PLACE	D	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K L L	CHINCLE	4-00m00-x	NOORU	CHARACTER OF STORM	
PENNSYLVANI	A I	Fastern Co	ont'd							
Lycoming County Montoursville	-	1535EST	ont u		0	0	3	?	Thunderstorm W	ind
	Thu	understorm	wind gusts	downed t	rees a	and u	tility li	ines.		•
PENNSYLVANI.	A, 1	Western	٠						•	
Fayette County 11 NE Uniontown	01	0001EST			0	0	0	. 0	Flash Flood	
	Flo	oding conti	nued in Co	onnellsville	> .					
Somserset County 20 SW Somerset	01	0010EST		-	0	0	0	0	Flash Flood	
	Flo	oding occur	rred at Rou	ite 281 in	Conf	luence	₽.			
Westmoreland Count 16 S Greensburg	y 01	0022EST			0	0	0	0	Flash Flood	
-	Jac	obs Creek i	n Scottdale	flooded.					•	
Fayette County 16 NE Uniontown	01	0030EST			0	0	4	0	Flash Flood Lightning	
	The Eve	ere was floc erson and C	ding on Ja	acobs Cree with an e	k in stima	Evers	on. S	Six cow	s were killed by li	ghtning between
Westmoreland County	v									
16 SW Greensburg			mad alana	Jacoba Cr	0 aak ir	O' Smit	O	0 Ponde	Flash Flood were closed and to	valve homes had
	bas	ement flood	ling.	Jacobs Cit	æk II.	i Siiii	unon.	Noaus	were crosed and the	weive nomes had
Somerset County 20 SW Somerset	01	0040EST			0	0	0	0	Flash Flood	
	Wh	ites Run wa	as over its	banks in t	he so	uthwe	esterni	part of	county.	
18 SW Somerset	01	0050EST			0	0	0	0	Flash Flood	
	Coı	nfluence rep	orted mud	slides near	Rou	te 28	1.			
Greene County 4 NW Waynesburg	01	1020EST- 1022EST	0.5	50	0	0	4	0	Tornado (F1)	
•	A t	ornado touc	hed down	in eastern (Green	Cou	nty. A	trailer	and a car were flipp	ed in Sycamore.
Erie County Erie	04	2325EST			0	0	0	0	Hail (0.75)	
	Dir	ne-size hail	was repor	ted and tre	es an	d lim	bs wer	re dow	n near Pennisula Ro	oad.
Erie Erie	04 05	2343EST 0010EST			0	0	0	0	Thunderstorm W Thunderstorm W Hail	ind ind

Power lines and trees were blown down near Buffalo Road to Peach Street in Erie. Numerous reports of dime- to three-quarter-inch hail near Route 190 and Route 430 near Erie.

					NO.	OF	ESTU	MATED		JULY 1990
	°D	LOCAL	IENCTH	UINTH	PER	OF SONS	<u> </u>	AGE		
PLACE	ě	STANDARD	LENGTH OF PATH	WIDTH OF PATH	֓֞֝֝֞֝֝֞֝֓֓֓֓֓֓֓֓֓֡֝֡֝	Ņ	Ŕ	0.00ac	CHARACTER	
) E		(MILES)	(YARDS)	E	DE LE	-con 00a	S	STORM	
						D	Y			
PENNSYLVANIA	4, 1	Western C	ont'd							
Washington County Washington	05	1115EST			0	0	0	0	Thunderstorm Wind	
•	Sev	eral big tre	es were ble	own down	in W	ashin'	gton.			
Indiana County 20 NE Indiana							_			
20 NE Indiana	05	1138EST			0	0	0	0	Thunderstorm Wind	
	Nu	merous big	trees were	blown do	wn in	Chei	ry Tre	æ.		
13 SW Indiana	05	1207EST			0	0	0	0	Thunderstorm Wind	
	Lar	rge trees we	re blown o	lown in Bl	airsvi	lle.				
Cambria County 9 W Ebensburg	05	1252EST			0	0	0	0	Thunderstorm Wind	
, <u>2</u> 00120		wer lines we	ere downed	l near Rou	_		_).		
Favette County				11041				•		
Fayette County 13 NW Uniontown	05	1430EST			0	0	0	0	Thunderstorm Wind	
	Pov	wer lines an	d numerou	s large tre	in Bro	wnsville.				
17 NW Uniontown 13 NW Uniontown	05	1435EST			0	0	0	0	Flash Flood	
25 11.17 5 22.51.2			ment flood	ing occurr				v and	Brownsville.	
Washington County						, -		,		
13 SE Washington	05	1915EST			0	0	0	0	Hail (0.75)	
	Thr	ree-quarter-i	nch-size h	ail was rep	orted	at M	ariann	a		
Venango County 2 N Franklin	09	1210EST			0	0	0	0	Thunderstorm Wind	
	Pov	wer lines an	d large tre	es were do	wned	near	Route	208 a	nd Patchell Run.	
Franklin	09	1223EST			0.	0	0	0	Flash Flood Thunderstorm Wind	
	The	ere was stree dslides in th	et flooding ne western	in Frankli	n. Tr anklir	ees ar 1.	nd pow	er line	s were also down. There	were some
Clarion County				-						
Clarion	09	1230EST			0	0	0	0	Flash Flood	
	Sto	rm sewer ar	nd poor dra	ainage cau	sed fl	oodin	g in C	larion.	•	
Clearfield County Clearfield	09	1230EST			0	0	0	0	Thunderstorm Wind	
	Tre	es were dov	vned in Cl	earfield.					•	
Venango County Franklin	09	1240EST			0	0	0	0	Thunderstorm Wind	
1.19HPTH			an suama da	umad i= E	_		U	U	THORIGETSWITH WING	
Infforma Courts	IVIO	re large tree	s were uo	ми са II I Г	ıaukl	111.				
Jefferson County Brookville	09	1255EST			0	0	Ö	0	Thunderstorm Wind	
	Tre	es were dov	vned in Br	ookville.						

		TIME		<u> </u>	NO.	OF SONS	EST IN	AATED	7	JULY 19	90
PLACE	D A E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K L L L L L L L L L L L L L L L L L L L	OHBICL X-		CECOEN	CHARACTER OF Storm		
PENNSYLVANL	A, \	Western C	cont'd ,								
Venango County 7 E Franklin	09	1310EST			0	0	0	0	Thunderstorm Wi	ind	
	Pov	wer lines we	ere blown	down near	Oil	City.					
Forest County 3 E Tionesta	09	1330EST			0	2	0	0	Lightning		
	Tw	o people we	ere hit by	lightning.							
Venango County 7 E Franklin Franklin	09	1330EST			0	0	0	0	Thunderstorm Wi	nd	
	Pov	wer lines ar urred in cer	nd trees w ntral Vena	ere downe	d in y. Ti	Oil (here v	City an vas stre	d Francet floo	nklin. Also small soding in Franklin.	stream floodi	ng
Armstrong County 5 NE Kittanning 8 N Kittanning	09	1330EST			0	0	5	0	Flash Flood		
	Ser	ious floodin	g occurred	l at Mosgro	ove a	nd Te	mpleto	n.At	oridge was washed o	ut at Mosgrov	æ.
Clearfield County	09	1342EST			0	0	0	0	Thunderstorm Wi	nd	
	The	ere were do	wned trees	and powe	r line	s thro	ughou	t the c	ounty.		
Beaver County 4 S Beaver	09	1415EST			0	0	0	0	Thunderstorm Wi	nd	
	Tre	es were dov	wned by th	understorr	n win	id.					
Allegheny County 2 E Pittsburgh	09	1430EST			0	0	0	0	Thunderstorm Wi	nd	
	Tre	es were dov	wned in Ea	ast Liberty.	•						
Westmoreland Count 9 SW Greensburg 15 SW Greensburg	•	1505EST			0	0	0	0	Thunderstorm Wi	nd	
	Tre	es were dov	wned 4 mi	les south o	f Irw	in and	1 3 mil	les east	t of Monessen.		
Beaver County Beaver	09	1518EST			0	0	0	. 0	Flash Flood		
	The	ere was stre	et flooding	g in Beaver	and	strear	n flood	ling in	Rochester and Brid	gewater.	
Allegheny County 22 E Pittsburgh	09	1515EST			0	0	0	0	Flash Flood	•	
	Stre	eet flooding	occurred	in Monroe	ville.						
Washington County 8 N Washington	09	1545EST			0	0	0	0	Thunderstorm Wi	nd	
	Tre	es were blo	wn down	in Canonsh	ourg.		•				
Allegheny County 3 E Pittsburgh	09	1545EST			0	0	0	0	Flash Flood		

There was flooding of South Fork of Montour Run near Imperial.

	77115		Ţ	ΙΝΟ.	OF SONS	ESTIM DAMA	AIED	JULY 1	990
	D LOCAL		итотн	K	TI				
PLACE	STANDA	i Ur.	WIDTH OF PATH (YARDS)	LED	Ommon Le		CACOAO	CHARACTER OF STORM	
PENNSYLVANIA	A, Wester	n Cont'd							
Beaver County Beaver	09 1545E	ST		0	0	0	0	Flash Flood	
		ontinued in B	ridgewater	•					
Westmoreland County Greensburg	, 09 1600E	ST		0	0	0	0	Thunderstorm Wind	,
	Trees and	ower lines w	ere down i	n Gr	eensbu	ırg.			
Armstrong County									
Kittanning 6 N Kittanning	09 1600E	ST		0	0	5	0	Flash Flood	
	Road flood Water was	ing occurred up to the sec	in Kitannii ond railing	ng. ' on N	The Sl Mosgro	herret I ove Bri	Bridge dge.	on Huling Run was washed aw Twenty four homes were flooded	ay. J.
Somerset County 14 S Somerset	09 1610E	ST		0	0	0	0	Thunderstorm Wind	
	Tree damag	ge occurred in	n Meyersda	le.					
Butler County 4 NE Butler	09 1620E	ST		0	0	0	0	Flash Flood	
	Basements	were flooded	4 miles no	rthea	st of	Butler.			
Armstrong County									
Indiana County Clearfield County	10 1425E	ST		0	0	0	0	Flash Flood	
	Roadway, lounties.	pasement, and	stream floo	oding	occur	red in A	Armstr	ong, Butler, and southern Clearfi	eld
Butler County 9 NE Butler 6 SW Butler	12 0900E	ST		0	0	0	0	Flood	
	The roads	were closed in	n the south	weste	rn qu	arter of	the co	ounty due to flooding. Evacuation	ons
	occurred in	Fairview. F	Flooding oc	curre	d on	Thorn (Creek	near Renfrew.	
Beaver County 8 N Beaver	12 1015E	ST		0	0	0	0	Flood	
	Wallace Ru	in in the nort	hern part o	f the	count	y was o	out of	banks.	
Jefferson County Armstrong County	12 1015E	ST		0	0	0	0	Flood	
	Basement a	and street floo	ding occur	red in	n Jeffe	erson ar	nd Arı	nstrong counties.	
Clarion County 12 S Clarion	12 1040E	ST		0	0	0	0	Flood	
	Town Run	in southern (Clarion Cou	inty f	loode	d.			
Butler County 12 W Butler 6 SW Butler	12 1045E	ST		0	0	0	0	Flood	
			flooded in I	anca	ster.	One-hu		twenty -five to 150 people evacua	ted

			<u> </u>	Lua	25		WATER	· · · · · · · · · · · · · · · · · · ·	JULY 1990			
	TIME			PER	SONS	DAM	MATED AGE					
PLACE	D LOCAL T STANDARD	LENGTH OF PATH	WIDTH OF PATH	K	Ŋ		COCOL	CHARACTER				
, case	É	(MILES)	(YARDS)	E	DATE:	CONTOCUE	Š	STORM				
					Ď	Y						
PENNSYLVANI	A Western C	ont³d										
Armstrong County	12 1105EST	ont u		0	0	0	0	Flood				
Armstrong County		dina in A	rmstrona (_	-	U	U	riood				
Pagrage County	There was floo	omig m A	imstrong C	Jouni	y• .							
Beaver County 4 NE Beaver	12 1110EST			0	0	0	0	Flood				
	Flooding occur	red at Nev	w Brighton	Stre	et.							
Jefferson County 17 SE Brookville	12 1110EST			0	0	0	0	Flood				
17 SE BIOOKVIIIE		mont floor	dina ossum	-		_			ſ			
Danies County	Street and base	ment noo	uing occum	rea in	l Pun	xsutav	vney.	Big Run Creek flooded	••			
Beaver County 8 SW Beaver	12 1145EST			0	0	0	0	Flood				
	Street and base	ment floor	ding occur	red in	Indu	ıstry.	Four !	Mile Run flooded.				
Westmoreland Count	y 10 1020E0T			^	^	^	•	rvi 1				
8 W Greensburg	12 1230EST	4	f. 11.	0	0	0	0	Flood				
In Proceedings	There was flooding on Meadowbrook Run in North Huntingdon.											
Indiana County 2 NE Indiana	12 1300EST			0	0	0	0	Flood				
	Road flooding	intersection	on of Route	e 286	and	119.	Basem	ent flooding in the nor	thern part of			
Clearfield County	county. 12 1300EST			0	0	0	0	Flood				
Clearned County		nant fload	ling theory				U	riood				
Cambria County	Road and bases	nent 11000	mg unoug	Hout	Coun	ıy.	•	•				
19 NE Ebensburg	12 1330EST			0	0	0	0	Flood				
	Flooding in Re	ade Town	ship.									
Westmoreland Count	y 12 1400EST			0	0	0	0	Flood				
12 E Greensburg		ling in Do		U	U	U	U	rioou				
Washington County	Basement flood	ing in De	iry.									
Washington County Washington	12 1415EST			0	0	0	0	Flood				
	Road flooding	in Washin	gton.									
Allegheny County 12 SE Pittsburgh	12 1430EST			0	0	0	0	Flood				
12 SE Husourgi	Chartiers Creek	r at Beidae	wille out c			U	U	riood				
7 S Pittsburgh	12 1430EST	at Diluge	eville out c	л оан О	uks. O	0	0	Flood				
/ 5 i iusouign		oute 079 :	vac alacad		_			•				
Westmoreland	A portion of R	ouic,7/8 \	was ciosed	uue I	o no	ormig	ш Оак	uait.				
County	12 1440EST			0	0	0	0	Flood				

Road and stream flooding occurred throughout the county.

JULY 1990

			TIME			NO.	OF SONS	EST II	MATED AGE]	1770
	PLACE	DA-E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	Comp. 1—ch	Omac.z-	4-1200 D. 20	NTOWO	CHARACTER OF Storm		
]	PENNSYLVANIA	۱, ۲	Western C	ont'd				r				
(Cambria County 6 E Ebensburg	12	1500EST			0	0	0	0	Flood		
	5		d flooding	occurred i	n Cresson.			·				
4	Allegheny County	10	1500EST			^	^	^	^	Tri J		
	16 E Pittsburgh		ite 28 was f	flooded	,	0		0	0	Flood		
1	Washington County	ROC	ite 20 was i	nooded.								
	18 E Washington	12	1500EST			0	0	0	0	Flood		
			ad flooding	occurred i	n Charlero	i.						
1	Westmoreland County 8 E Greensburg	12	1500EST			0	0	0	0 .	Flood		
		Bas	ement and 1	road floodi	ing were re	porte	d in 1	Latrob	e.			
	12 NW Greensburg	12	1520EST		•	0	0	0	0	Flood	•	•
		Stre	am flooding	g Murrays	ville.					•		
4	Allegheny County 17 NE Pittsburgh	12	1520EST			0	0	0	0	Flood		
	17 ND Husburgh		am flooding	g in Dorse	vville.			Ů	v	11000		
	17 SE Pittsburgh		1520EST	5 2 0.00	,	0	0	0	0	Flood		
	J	Rou	ite 88 was o	closed in S st Mifflin.	outh Park	with	6 inc	hes of	water	on Brownsville Roa	ad. Roads	were
	27 E Pittsburgh	12	1520EST			0	0	0	0	Flood		
		Rot	ite 30 was o	closed near	Monroev	ille dı	ie to	landsl	ide.			
١	Washington County 10 N Washington	12	1522EST			0	0	0	0	Flood		
		Mil	lers Run ou	it of banks	in Cecil 7	owns	ship n	ear Ro	oute 50).		
1	Allegheny County 3 S Pittsburgh	12	1525EST			0	0	0	0	Flood		
		Мо	ntour Run v	was out of	its banks a	at Imp	perial.	, with	basem	ent flooding reporte	æd.	
I	Fayette County 10 NW Uniontown	12	1545EST			0	0	0	0	Flood	1	
				curred on l	Route 906					and Fayette City.		
I	ndiana County		1600EST			0	0	0	0	Flood		
_	_	Bas	ement flood	ling occurr	ed in parts	s of I	ndiana	a Cour	ıty.			
I	Beaver County 10 SW Beaver		0237EST			0	0	0	0	Flash Flood		
		Flo	oding on Ro	oute 68 ne	ar Midland	i.		•				

			TIME			NO.	OF SONS	EŞŢŢ	MATED AGE		JULY 1990
		D	LOCAL	LENGTH	WIDTH	K	I				
	PLACE	D E	STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)) L	a Juanua	90000	CECOEN	CHARACTER OF STORM	
	PENNSYLVANL	A, \	Western C	lont'd							
	Beaver	15	0456EST			0	0	0	0	Flash Flood	
		Roa	ad flooding	near Beav	er.						
1	Butler County 17 NW Butler	15	0530EST			0	0	0	0	Flash Flood	
		Rou	ute 173 floo	ded in Slip	ppery Roc	k.					
1	Westmoreland County 2 SW Greensburg 12 W Greensburg	y 15	1300EST			0	0	0	0	Flood	
	.	Roa		overed by ownships.	streams a	ınd b	asemo	ent flo	oding	occurred in Hempf	ield and South
:	Somerset County 18 NE Somerset	15	1330EST			0	0	0	0	Flood	
		Stre	eams were	over roads	in Tire Hi	11.					
]	Fayette County 15 NW Uniontown	15	1330EST			0	0	0	0	Flood	
			eams were wnsville.	over road	ds in Bro	wnsv	ille a	nd Is	abella.	Basement flooding	ng occurred in
]	Beaver County 11 NW Beaver	15	1500EST			0	0	5	0	Flood	
		Non hon	rth Fork of nes were af	Little Bea fected. So	ver Creek me had m	out c	of ban lamag	ks in l	Darling	ton and New Galille	ee. Thirty-five
	13 NE Beaver	15	1500EST		•	0	0	0	0	Flood	
		Cor	noquenessi	ng Creek v	was over it	ts ban	ıks in	Frank	lin Tov	wnship closing two	roads.
•	Clearfield County 15 SE Clearfield Clearfield	15	1530EST			0	0	0		Flood	
	Ciculifold		oded basem	ents in Os	ceola Mill	•			•		
J	Butler County 14 SW Rutler		1323EST	onto m Os		0	0	0	0	Thunderstorm Wi	nd
	14 5W Budg		es were dov	un in Sara	er and Mid	-			-	i i i i i i i i i i i i i i i i i i i	Ш
	Greene County	110	cs were do	vii iii Sai v	ci and ivin	IGICS	-A 10	Musiuł	<i>,</i>		
•	Waynesburg	20	1326EST			0	0	0	0	Thunderstorm Wi	nd
		A la	arge tree wa	is downed	2 miles w	est of	f Way	nesbu	rg near	Rt. 18.	•
]	Butler County 18 SW Butler	20	1345EST			0	0	0	0	Thunderstorm Wi	nd
		Wir	es were do	wn in Crar	berry and	Harr	nony.				
1	Armstrong County 19 S Kittanning	20	1401EST			0	0	0	0	Thunderstorm Wi	nd
			_								

Lines were down in Apollo.

				T			r			JULY 1990
		TIME			PER	SONS	EST IN	MATED AGE		
PLACE	D	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K L	CHINGLE	4-cam 5020	COCOCO	CHARACTER OF STORM	
PENNSYLVANI	A, \	Western C	ont'd							
Somerset County 12 W Somerset	20	1530EST			0	0	0	0	Thunderstorm Wir	nd
	Tre	es and pow	er lines w	ere down i	n Sev	en Sp	orings.			
7 W Somerset	20	1615EST			0	0	0	0	Thunderstorm Wir	nd
	Tre	es were dov	vn betwee	n Bakersvi	lle ar	d Ro	ckwoo	d.		
Allegheny County 4 NE PIT	21	1430EST			0	0	0	0	Flash Flood	
	Ro	ads were flo	oded on C	Ohio River	Boul	evard	near I	[-79, w	ith water a half foot	deep.
Butler County Butler	21	1530EST			0	0	0	0	Flash Flood	
	Str	eets were flo	ooded in E	Butler.						
Washington County 2 N Washington	21	1530EST			0	0	0	0	Flash Flood	
	Sev	eral creeks	were out	of banks in	Sou	th Str	abane.			
Fayette County Uniontown	21	1948EST			0	0	0	0	Flash Flood	
	Str	eet flooding	in Union	town. Red	lstone	Cree	k and	Coal I	Lick Run flooded.	
Washington County 2 N Washington	22	1325EST			0	0	0	0	Flash Flood	
	Sev	eral creeks	out of ban	ks. Floodi	ing of	Rt. 1	9 in V	Vashing	gton and South Straba	ne Townships.
Butler County Butler	22	1530EST			0	0	0	0	Flash Flood	
	Str	eets were flo	ooded in E	Butler.						
Beaver County 12 SW Beaver	22	1628EST- 1653EST	3.0	50	0	0	4	0	Funnel Cloud Tornado (F1)	
	A 1 Ho	funnel cloud okstown and	l was sigh d a barn ro	ted in Rac oof off in (coon Green	and C Tow	Center nship.	Towns Dissi	hips. Windows wer pated over Big Knob	e blown out in
Lawrence County 8 NW New Castle	22	1658EST- 1715EST	?	?	0	0	0	0	Tornado (F0)	
	A١	weak tornad	o briefly t	ouched do	wn n	ear Ne	ew Bec	dford.		
Butler County 15 NW Butler	22	1745EST- 1750EST	0.5	?	0	0	0	0	Tornado (F0)	

A tornado touched down briefly at intersection of Rt. 442 and 19 west of Lake Arthur.

Tornado (F0)

					NO.	OF	FCTII	VATED	JULY 1990
		TIME			PER	SONS	<u> </u>	AGE	
PLACE	P	LOCAL STANDARD	LENGTH OF PATH	WIDTH OF PATH	Ķ	Ŋ	-composed	N _D O _D O	CHARACTER
	E		(MILES)	(YARDS)	E	Owned	PER	S	STORM
						D	Ÿ		
PENNSYLVANI	A, \	Western C	ont'd						
Butler County				•					
18 NW Bufler	22	1803EST- 1856EST	3.5	?	0	0	0	0	Tomado (F0)
	A Por	weak tornac tersville.	do skipped	d and lifte	xd in	a pa	th fro	m Coo	opers Lake in Worth Township to
Beaver County 18 SW Beaver	22	1905EST			0	0	0	0	Thunderstorm Wind
	Tre	es were dov	wned in Ra	accoon Star	te Pa	rk by	thunde	erstorn	n wind.
Butler County					_	_	_	_	
14 NW Bufler		1915EST	?	?	0	0	0	0	Tomado (F0)
		ak tornado l	oriefly touc	ched down	arou	nd Sli	ppery l	Rock T	'ownship south of Dougherty's Mill.
RHODE ISLAND)								
Kent County	24	2200EST- 2400EST			0	0	0	0	Lightning
	Lig Wa	htning structure. Wes	ck power t Warwick	lines knoc	king Gree	out p	ower	to sev	eral thousand electric customers in
SOUTH CAROL				.,				,	
Spartanburg County	41 4 7 3	•							
Boiling Springs	01	1448EST			0	0	?	?	Hail (0.75)
York County Fort Mill	01	1530EST			0	1	0	0	Lightning
Lake Wylie area York	01 01	1530EST 1530EST			0	0	?	0	Thunderstorm Winds Thunderstorm Winds
Rock Hill	01	1530EST			Ŏ	Ŏ	?	Ŏ	Thunderstorm Winds
	A 4 and	l0-year-old second-deg	man was s gree burns	tanding ne over parts	ar a t	ree w is bod	hich w y.	as stru	ack by lightning. He received first-
Chester County Great Falls	01	1530EST			0	0	?	?	Hail (1.00)
Greenville County 2 N Pelham	01	1600EST			0	0	3	0	Thunderstorm Winds Hail (0.75)
Spartanburg County 3 SE Greer Jetport	01	1620EST			0	0	5	?	Thunderstorm Winds
2 N Cross Anchor	01	1622EST			0	0	?	?	Hail (1.75) Hail (1.25)
Greenville County									
7 ENE Simpsonville	01	1630EST			0	0	5	5	Thunderstorm Winds
5 E Simpsonville	01	1635EST			0	1	3	0	Hail (1.75) Lightning
\$	Lig	htning struc	k a mobil	e home, in	jurin	g one	persor	1.	
Laurens County	. ^4	1640000			^	^	a	n	Thursdomes W. J
7 ESE Simpsonville		1642EST			0	0	?	?	Thunderstorm Winds Hail (1.75)
Nr Clinton	01	1705EST			0	0	?	?	Thunderstorm Winds

INO OF TENTIMETER

JULY 1990

		TIME	,		NO.	OF SONS	EST 11 DAM/	MATED AGE		8021 1770
PLACE	D E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K-1-m0	- N-) Decimo	<u>0.0000±000−></u>	റക്കാം	CHARACTER OF STORM	
SOUTH CAROL	ΙΝΑ	Cont'd								
Joanna	01	1715EST			0	0	?	?	Thunderstorm Win	ıds
Marlboro County Lester Dillon County	01	1715EST			0	0	?	0	Thunderstorm Win	ıds
Countywide Dillon Sumter County	01 01	1730EST 1730EST			0	0	?	0 ?	Thunderstorm Win Hail (1.00)	ds
E portions	01	1730EST			0	0	?	?	Thunderstorm Win	ds
Clarendon County Wyboo	01	1730EST			0	0	?	0	Thunderstorm Win	ıds
Chesterfield County Cheraw State Park	01	1735EST			0	0	?	0	Thunderstorm Win	ds
Kershaw County Lugoff Newberry County	01	1740EST			0	0	5	0	Lightning	
Whitmire Newberry	01 01	1800EST 1800EST			0	0	? ? ?	0	Thunderstorm Win Thunderstorm Win	
Prosperity Calhoun County	Ŏİ	1800EST		•	ŏ	ŏ	?	ŏ	Thunderstorm Win	
Cameron	01	1830EST			0	0	?	0	Thunderstorm Win	ds
Clarendon County Turbeville Barrineau	01 01	1830EST 1830EST			0	0	?	0	Thunderstorm Win Thunderstorm Win	
Lexington County Lexington	01	1830EST			0	0	?	0	Thunderstorm Win	ds
Richland County Columbia	01	1840EST			0	0	?	0	Thunderstorm Win	ds
Calhoun County Ft. Motte St. Matthews	01 01	1915EST 1915EST			0	0	?	0	Thunderstorm Win Thunderstorm Win	
Orangeburg County Orangeburg Vance	01 01	1920EST 1920EST			0	0	?	0	Thunderstorm Win Thunderstorm Win	ds ds
Orangeburg County Eutawville Holly Hill Orangeburg	01 01 01	1945EST 1945EST 1950EST			0 0 0	0 0 0	?	0 0 0	Thunderstorm Win Thunderstorm Win Thunderstorm Win	ds
Berkeley County Moncks Corner	01	2005EST			0	0	?	0	Thunderstorm Win	ds
Dorchester County Givhans	01	2030EST			0	0	?	?	Hail (0.75)	
Clarendon County Lake Marion	01	1930EST			0	0	?	0	Thunderstorm Win	ds
Charleston County James Island Johns Island	01 01	2100EST 2100EST			0	0	?	0	Thunderstorm Win Thunderstorm Win	

Severe thunderstorms occurred over a large portion of South Carolina in the late afternoon and early evening hours. A severe thunderstorm developed in the area of the Greer Jetport and then moved southeast along the Enoree River to northern Laurens County. It then moved south to Clinton and Joanna, and into Newberry County. Large hail fell for 30 minutes from south of Pelham, along the Enoree River, to about 7 miles east of Simpsonville. Hail severely damaged automobiles and roofs of homes. Thunderstorm winds blew down many trees and caused minor property damage over a large area. The worst wind damage resulted when a microburst on the northern side of the storm destroyed a mobile home and caused considerable damage to other mobile homes and houses 3 miles southeast of the Greer Jetport. According to witnesses, the hail storm had just about stopped, and the sun began to shine, when the microburst struck. During the passage of the storms, more than 10,000 customers were without electricity, as thunderstorm winds and microbursts blew trees and limbs into power lines. Many counties reported localized damage to mobile homes and trees across roads. There were at least two automobile accidents in the state involving cars running into trees which had fallen across roads. In Lugoff, lightning struck an automobile dealership building.

									JULY 19
		TIME			NO. PER	OF SONS	ESTIM DAMA	IATED IGE	
PLACE	DAO E	LOCAL STANDARD	LENGTH OF PATH (MILES)	PATH (YARDS)	KILLED	×-	4-0am v0.av v	CECOEN	CHARACTER OF STORM
SOUTH CAROL	INA	Cont'd							
SCZ001-002-003-004 005-006-007-008 Statewide	- 01- 30				0	0	0	?	Drought
	Dry wat den	er suppliers	had to ena ter. The d	act volunta:	ro or	, dam manda	aging o	crops a	and affecting wildlife. Several publics restrictions to cope with the heavest one fish kill, in Boiling Spring
Spartanburg County Lyman & Wellford	06	1442EST		•	0	0	?	?	Thunderstorm Winds
	Thu	ınderstorm	winds blev	w down a	few to	rees au	nd pow	ver lin	es.
Fairfield County Ridgeway	06	1625EST			0	0	?	?	Hail (0.75)
	Hai	il was repor	ted with d	lamage unk	nowi	1.			
SCZ007 South Coast	07	Unknown			1	0	0	0	Heat
	A 6	69-year-old	man died	of prolong	ed ex	posur	e to ex	treme	heat in Jasper County. (M69?)
Pickens County Easley	08	1645EST			0	0	?	0	Thunderstorm Winds
Anderson County Northern portions Greenville County	08	1700EST			0	0	?	0	Thunderstorm Winds
Western portions Spartanburg County	08	1715EST			0	0	?	0	Thunderstorm Winds
Spartanburg County	08	1730EST			0	0	?	0	Thunderstorm Winds
·	Cor Gre are:	untv include	ed several inty, trees ire than 3,0	homes, whomes, whomes were blow: 000 custom	nich l	had tr	ees blo	o nwo	e in Easley. Damage in Anderson to them, and five utility poles. amage was in the western Greenvilicity for several hours. Also, small
SCZ007 South Coast	09	Unknown			1	0	0	0	Heat
	An	81-year-old	d man died	l of heat st	roke	in Do	rcheste	er Cou	nty. (M81?)
Lexington County St. Andrews Area 2 S Irmo	11 11	1500EST 1525EST			0	0	?	0	Thunderstorm Winds Thunderstorm Winds
Richland County Columbia	11	1545EST			0	0	?	0	Thunderstorm Winds
Lexington County South Congaree 12 S Cayce	11 11	1945EST 2000EST			0	0	?	0	Thunderstorm Winds Thunderstorm Winds
	Wi	nds from tv	vo margina	ally severe	thun	lersto	rms do	wned	trees.

A 58-year-old woman died of heat prostation (hypothermia) at Olympia Cemetery. (F580.)

0

Heat

Richland County Columbia

10 Unknown

•	, , , , , , , , , , , , , , , , , , , 								JULY 1990
	TIM			NO. PER	SONS	ESTIM DAMA	AGE		
PLACE	D LOCA	i OF	WIDTH OF PATH	K	Ņ	- Com to Coor to	NTOWO	CHARACTER OF STORM	:
		(MILES)	(YARDS)	E	OmmoC.*	- P.	S	STORM	
SOUTH CAROL	INA Conf	r'd					-	1 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 -	
SCZ001-002	n vzi com	. •							
Mountains & Foothills	12 Unkr	own	•	1	0	0	0	Heat	
	Extreme h (M67?)	neat possibly c	ontributed	to the	e deat	h of a	67-ye	ar-old man in Spar	tanburg County.
Florence County Florence	12 Unkn	own .		1	0	0	0	Heat	
	A 70-year	-old man died	of complic	ation	s of h	eat stro	oke at	a woodyard. (M70	00)
Greenwood County Ware Shoals	13 PM			0	0	4	0	Lightning	
	Lightning	killed 17 cows	, valued at	\$10,2	200, a	fter str	iking t	wo cedar trees abou	t 20-feet tall and
	75-feet ap	art in the mide	lle of a pas	sture.	The	cows v	were la	lying between the tr	ees.
Dorchester County Ridgeville	18 1200	EST		0	. 0	5	0	Lightning	
Charleston County Charleston	18 1500	EST		0	0	?	0	Flooding	
	Heavy rai	n caused flood padcasting tow	ling in dow er.	vntow	n Cha	arlestor	n. In	Ridgeville, lightnin	g struck a radio
Barnwell County Williston	18 1330	ГСТ		0	0	?	0	Heavy Rain	
W IIIISWAI			of the roof			·		kie-Narco, Inc. plan	t after becoming
	water-logg	ged.	or the root	Coma	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	it the h	OW 1517	tio itaroo, me. pia	t unter occoming
Anderson County Anderson	21 1500	EST		0	0	0	?	Thunderstorm W	inds
	Thunderst		lew down	a fe	w tre	ees an	d pow	ver lines during a	briefly severe
Horry County	ununuon on	· · · · · · · · · · · · · · · · · · ·							
Pee Dee Crossroads	21 1915	EST	•	0	0	?	?	Hail (0.75)	
	Very heav spotter on	y rain, strong U.S. 378.	gusty wind	ls, an	d one-	-half to	three	-quarter-inch hail w	as reported by a
Dorchester County Ridgeville	21 1950	EST		0	0	?	0	Thunderstorm W	inds
	The Sheri	ff's office repo	rted severa	ıl larg	e tree	s down	ned.		
Pickens County Clemson	22 PM			0	0	?	0	Thunderstorm W	inds
		orm winds ble	w a few tre	ees do	wn d	uring a	ı briefl	y severe thundersto	rm.
Barnwell County						_		,	
Barnwell	22 1430		. .	0	0	4	0	Lightning	
II	Lightning	started a hous	e fire, afte	r trav	eling	inroug	n telev	ision wires.	
Horry County Garden City	24 PM			0	0	?	0	Lightning	
	Lightning condomin		ole in a c	condo	miniu	m uni(t on t	he fourth floor at	the Sea Banks

JULY 1990

		TIME			NO. PER	OF SONS	EST II	AATED AGE	
PLACE	DAOLE	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	R) T IND	CHINGC. E.	~-com.00xa.v	ORCORN	CHARACTER OF STORM

		<u></u>			D	B	Ŗ		
SOUTH CAROL	INA	Cont'd							
Beaufort County Hilton Head Island	24	1330EST			0	0	4	0	Lightning
	par	ked among	many meta	il airplanes	and '	was th	e only	y one s	ked at Hilton Head Airport. It was struck by the bolt. A rudder on one ging the plane's electrical system.
Berkeley County 4 NW Moncks Corner	24	1605EST	•		0	0	?	0	Lightning
	Ap _j dov	proximately vn utility lii	1,000 res	sidents lost	pow	er wh	en lig	htning	struck trees and the trees knocked
SOUTH DAKOT	A								
Carson County McLaughlin McLaughlin	01 01	0030CST 0055CST			0	0	0	0	Hail (1.75) Hail (1.75)
Walworth County 1 N Mobridge	01	0205CST			0	0	0	0	Hail (1.00)
Dewey County 6 S Isabel	07	2014CST		•	0	0	0	0	Hail (1.75)
Campbell County Pollock	07	1934CST			0	0	3	0	Hail (1.75)
	Sev	eral car wii	ndows wer	e broken a	nd so	me bu	ilding	gs were	e damaged.
Campbell County Herreid	07	2000CST			0	1	6	6	Hail (5.00)
	catt	tle in the ar	ea were a	so injured	bv tl	ne lars	e hai	l. Cro	in a field near Herreid. Numerous ops were badly damaged with some wn suffered damage; mostly broken
Campbell County 10 W Eureka Edmunds County	07	2027CST			0	0	0	0	Hail (1.75)
Mina Brown County	07	2115CST		•	0	0	0	0	Thunderstorm Wind (G54)
Ferney	07	2200CST			0	0	0	0	Hail (0.75)
Day County Roslyn	07	2230CST			0	. 0	?	0	Thunderstorm Wind
	Thi she	understorm veting around	winds peel d two vehi	ed the roof cles parke	back I near	on a la	arge q buildir	uonset ig. M	building, wrapping some of the steel any trees were also damaged.
Butte County Belle Fourche Harding County	10	1846CST			0	0	0	0	Thunderstorm Wind (G50)
Harding County Buffalo Lawrence County	10	1849CST			0	0	0	0	Thunderstorm Wind (G50)

Lightning struck and completely destroyed a vacant barn.

1850CST 1915CST

17 0100CST

Lawrence County
Spearfish
Spearfish
McPherson County
10 N 4 E Eureka

0

0

4

Ō

0

Thunderstorm Wind (G50) Thunderstorm Wind (G56)

Lightning

<u> </u>	1	<u> </u>	ļ ·	T	NO.	OF	ESTIN	MATED		JULY	1990
		TIME	1540711		PĚŘ	SONS		AGE			
PLACE	D A E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	Cull-lino		-compose	NTOOO	CHARACTER OF STORM		
						D	Ť				
SOUTH DAKOT	'A (Cont'd		,			·				
Minnehaha County Sioux Falls	18	0440CST			0	0	0	0	Hail (1.00)		
Dewey County Timber Lake	18	0630CST			. 0	0	3	0	Lightning		
	Lig ext	thtning set inguished.	a home of	on fire ca	using	dam	age to	the 1	kitchen and a wa	ll before it	was
Potter County Lebanon	18	1740CST			0	0	0	0	Thunderstorm V	Vind (G57)	
Spink County Athol	18	1820CST			0	0	4	0	Thunderstorm V	Vind	
	Str	ong thunder	storm win	ds destroye	ed a l	oarn a	ind a c	amper	along with several	trees.	
Sully County Agar	18	0913CST			0	0	0	0	Hail (0.75)		
Stanley County 2 E Hayes	18	1712CST			0	0	0	0	Hail (1.75)		
Sanborn County 2 W Letcher	18	1721CST			0	0	0	0	Hail (0.75)		
Miner County 2 N Epiphany	18	1740CST			0	0	0	0	Hail (0.75)		
Stanley County 7 SE Hayes	18	1747CST			0	0	0	0	Hail (1.75)		
Stanley County 2 E Hayes	18	1748CST			0	0	0	0	Hail (1.75)		
Minnehaha County 3 E Baltic Valley Springs Dewey County	18 18	1809CST 1837CST			0	0	0	0	Hail (1.50) Hail (2.00)		
Glencross 2 S Timber Lake	24 24	1545CST 1816CST			0	0	0 0	0	Hail (1.75) Thunderstorm W	/ind (C52)	
4 E Timber Lake Spink County	24	1925CST		•	ŏ	ŏ	ŏ	ŏ	Thunderstorm W	/ind (G52)	
Redfield	27	0503CST			0	0	0	0	Hail (1.50)		
Kingsbury County 6 S Willow Lake	27	1500CST			0	0	?	?	Hail (2.75)	•	
	Bas Wi wir hor hai	llow Lake a ped out. Nu nes and veh	ail fell in a and then to merous tre icles from	an area 1- the south es were str broken w	to 1.: east. ripped indov	5-mile Crop d bare vs. A	es wide dama of lea farme	e and 1 age wa ves. T er repo	O miles long from s extensive with so here was also signi orted two of his she	6 miles sou ome crops to ficant dama eep killed by	th of tally ge to y the
TENNESSEE											
Loudon County Blount County Cumberland County	01 01 01	1233CST 1235CST 1300CST		•	0	0	0 0 2	0	Hail (0.75) Hail (1.50) Thunderstorm W	/ind	
Loudon County Roane County Monroe County	01 01 01	1335CST 1350CST 1400CST 1403CST		,	000000	0000000	0 2 0 0 3 2 0 2 2 0 3	0 0 0 0	Hail (0.75) Hail (1.50) Thunderstorm W Thunderstorm W	/ind /ind	
Loudon County	01	1403CST 1403CST 1425CST			Ŏ	Ŏ	0	0	Hail (1.50) Thunderstorm W	ind	•
McMinn County Polk County	01 01	1440CST 1530CST 1530CST			0	0 0 0	2 0 3	0	Thunderstorm W Hail (0.88) Thunderstorm W	'ind	

		TIME		<u> </u>	NO.	OF SONS	ESTI	MATED AGE	JULY 1990
	P	LOCAL	LENGTH	WIDTH OF PATH	K	I			CHADACTED
PLACE	Ē	STANDARD	OF PATH (MILES)	PATH (YARDS)	Cultura	M-JOMCC W	о.осОо.шо-≻	OPOPO	CHARACTER OF STORM
TENNESSEE Co	nt'd								
Claiborne County McMinn County	01 01	1620CST 1630CST 1630CST			0	0	2 0 2	0 0 0	Thunderstorm Wind Hail (1.75) Thunderstorm Wind
Polk County Anderson County Sevier County	01 01 01	1645CST 1650CST 1700CST			0000000000	0	20220330002	0 0 0	Thunderstorm Wind Hail (1.00) Thunderstorm Wind
Grainger County Loudon County	01 01	1700CST 1710CST 1745CST 1800CST			0	0 0 0	0	0 0 0	Hail (0.75) Hail (1.00) Hail (0.75) Thunderstorm Wind
Monroe County	01	1815CST			•	0	_	0	Thunderstorm Wind
	hea In H dan tree	ere thunder vy rain and Roane Coun nage to pow es were know r and a nea	producing ty, the root er lines. cked down	numerous f of an anti In Polk, N causing p	repo que sl IcMi ower	ern T rts of hop bi nn, L line	enness hail au uilding oudon outage	see in 1 nd wing in Har Claib s. In S	the afternoon and evening dumping d damage across mainly rural areas. Timan was blown off, causing major orne, and Monroe counties, several Sevier County, a trailer was flipped
Roane County	06	1800CST			0	0	2	0	Thunderstorm Wind
	Sev	eral trees w	ere downe	d by a thu	ınders	storm	at Roa	ane Co	unty Park.
Lawrence County	09	1230CST			0	0	4	0	Lightning
	A l	ightning str e killed by	ike caused a bolt of l	a fire whi ightning 4	ich de mile	estroy s wes	ed a he t of to	ome ne wn.	ear Lawrenceburg. Also, five cows
Monroe County	09	1300CST			0	0	2	0	Thunderstorm Wind
		arm buildin port.	g was sma	shed and	trees	were	downe	d by a	thunderstorm near Monroe County
Rutherford County	10	1300CST			0	1	4	0	Thunderstorm Wind
	Thu a ba	inderstorm arn and top	winds over	rturned a n	nobile the R	hom ockva	e injur de area	ing a n	nan inside. It also took the roof off
Franklin County	10	1530CST			0	0	2	0	Thunderstorm Wind
	Hig	h winds res	sulted in el	lectrical lin	nes be	eing d	lowned	by fal	ling trees in Decherd.
Hamilton County	10	1600CST			0	0	0	0	Thunderstorm Wind
	Pov	ver lines an	d trees we	re felled b	y thu	nders	torm v	vinds a	t east Brainerd.
Obion County Samburg	10	1600CST 1605CST	0.5	20	0	0	3	0	Tornado (F0)
	win torr	idows out of nado, which	of rental he touched d	ouse traile lown only	rs nea briefl	ar Red y. Ti	elfoot he stor	Lake. m blew	ado that damaged roofs and broke Several eyewitnesses observed the down antennas and snapped utility directly onto a trailer destroying it.
Bedford County	11	1620CST			0	0	0	0	Thunderstorm Wind
		merous trees the county.	s were dow	ned by thu	ınder	storm	winds	in She	lbyville and also in the northern part
Marshall County	11	1625CST			0	0	2	0	Thunderstorm Wind
	_	_							

Several trees were blown down and a small outbuilding was destroyed.

	1	1		T	I NO	OF	CCTI	MATER	JULY 19
		TIME			PĚŘ	SONS	DAM	MATED AGE	
DIACE	D	LOCAL	LENGTH OF PATH	WIDTH OF PATH	ľ	Ä	R	Ç	CHARACTER
PLACE	Ę	STANDARD	(MILES)	(YARDS)	Ę	CHICACL:	9 00 mg	0000	STORM
•			(MICES)	(18603)	Ď.	Ē	B		
		<u> </u>			L		Y		
TENNESSEE CO	ont'd	l							
Cannon County	11	1630CST			0	0	2 0	0	Thunderstorm Wind Flash Flood
	In mir	Woodbury, nor flooding	electrical was repo	lines were rted in the	knoc	ked o	ut due sectio	to tree	es falling across them. Also, son a heavy rains.
Warren County	11	1710CST			0	0	3	0	Thunderstorm Wind
	Thi add	understorms lition, a she	blew dow d was kno	vn trees in cked dowr	the i	orthe a trai	rn pari ler hoi	t of the	e county north of McMinnville. I pushed off its blocks.
Hamilton County	11	1730CST 1800CST	· .		0	0	0	0	Thunderstorm Wind Flash Flood
	Hig sou wa	gh winds to theastern pater about 0.	oppled tre art of the 5 mile sou	es and fl county nea th of the (ash i ir Ap Chatta	loodii ison a inooga	ng pro ind Oo a Airpo	oduced Itewah ort.	water that covered roads in the Also, roads were reported und
Knox County	11	1800CST			0	0	2	0	Thunderstorm Wind
	A f	felled tree fi	rom thund	erstorm wi	nds d	lamag	ed a ho	ome in	eastern Knox County.
Hamilton County Soddy Daisy		1410CST			0	0	0	0	Hail (0.75)
,	A :	severe thun nmunity of	derstorm p Hamilton	produced the County.	hree-	quarte	r-inch	hail fo	or a brief time in the Soddy Dais
Tipton County	12	1900CST			0	0	2	0	Thunderstorm Wind
	A f	farm shed w	as demolis	shed by str	ong v	winds	near (Covingt	ton.
Bradley County	21	2000CST			0	0	3	0	Flash Flood
	For flo	ur inches of oded in Cle	rain fell in veland wit	a 2.5-hous h one pers	r peri on ev	od cau	ising N ed fror	Mouse (n his h	Creek to overflow. Ten houses we ome.
Hamilton County	22	1540CST			0	0	1	0	Thunderstorm Wind
	On awa	Lookout May by thund	fountain ir erstorm w	n Chattano inds.	oga,	the av	vning	and so	me furniture of a house was blow
Coffee County	22	1600CST			0	0	4	0	Thunderstorm Wind
	Thi a p	understorm ickup truck	wind toppl in Tullaho	led a large oma.	tree,	which	smasl	ned the	front porch of a house and wrecke
Lake County	29	1830CST			0	0	4	0 .	Thunderstorm Wind
	mar hit	ny as two de	ozen traile: he west she	rs and renta ore near Ra	al hoi ay's C	nes w lamp,	ere dai which	maged	the third time in three months. A from falling trees. The area harde east of Tiptonville. One trailer was
TEXAS, Norther	rn								

Parker County Weatherford

02

Excessive Heat 10

Excessive heat was attributed to one fatality by heat stroke in a residence and ten heat-related injuries in Weatherford. (M59P)

	İ	TIME			NO. PER	OF SONS	EST II	MATED AGE	JULY 1
PLACE	D	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	C T T T T T T T T T T T T T T T T T T T	Omoc. 2-	P.OCOp.uso-Y	C) C) C) C) C) C) C) C) C) C) C) C) C) C	CHARACTER OF STORM
TEXAS, North	em C	ont'd							
Tarrant County Fort Worth	03				1	0	0	0	Excessive Heat
	Exc	cessive heat doors for a	was attril local garb	buted to or age collect	ne fat	tality ompai	by hea	at exha Fort W	oustion to a man who was work orth. (M390)
Panola County Panola	03	2150CST			0	0	0	0	Thunderstorm Wind
5 E Beckville	03	2220CST			0	0	0	0	Hail (1.75) Thunderstorm Wind
	A d Hig	lownburst b ghway 79 lo	lew down cated 5 m	several tre iles east of	es and Beck	d pow cville.	er line	s in Pa	nola and numerous trees along U
		1405.000			0	0	0	0	Thunderstorm Wind
Dallas County Richardson	05	1425CST			v	v	U	v	I HUMOCISCOIM WING

Tarrant County Fort Worth 05 ? 0 **Excessive Heat** Excessive heat was attributed to one injury in Fort Worth.

Lamar County 22 1435CST 0 **Paris** Thunderstorm Wind

A downburst blew down street signs, power lines, and several trees in Paris.

Dallas County Carrollton 29 1950CST Thunderstorm Wind A downburst blew the roof off a portion of a hotel in Carrollton.

Palo Pinto County Possum Kingdom Res ? 29 2130CST ? Thunderstorm Wind A downburst damaged the roof of a building at Possum Kingdom Reservoir.

McLennan County 4 N Axtell 30 1400CST Thunderstorm Wind

A downburst turned over a storage barn 4 miles north of Axtell.

Cherokee County 2 SW Jacksonville Thunderstorm Wind Jacksonville Hail (1.75) Hail (0.75) **Jacksonville**

A downburst blew down several trees 2 miles southwest of Jacksonville.

Shelby County Center 30 1605CST Thunderstorm Wind A downburst blew down power lines and large tree limbs in Center.

Angelina County 30 1845CST Thunderstorm Wind Lufkin

A downburst blew down several trees in Lufkin.

		77145		.	NO.	OF SONS	EŞŢĮ	MATED AGE		JULY 1990				
	D	LOCAL	LENGTH	WIDTH	K	SUNS	 			ľ				
PLACE	Ē	STANDARD	LENGTH OF PATH (MILES)	PATH (YARDS)	LED	2 JORGO	Dec Oomeo	0000	CHARACTER OF Storm					
					D	Ē	B							
TEXAS, Northern	n Co	ont'd												
Gregg County Longview	31	1732CST			0	0	?	?	Thunderstorm V	Vind (G55)				
Smith County Tyler	31	1805CST			0	0	?	?	Thunderstorm V	` .				
	Stre	Strong wind measured at 73 mph blew down trees and power lines in Tyler.												
TEXAS, Southern	n													
Orange County E of Vidor	03	1735CST			0	0	0	0	Thunderstorm V	Vind (?)				
	Hig	gh winds fro	om a thund	lerstorm bl	lew o	ver tr	ees tha	ıt dowr	ned power lines eas	st of Vidor.				
Tyler County Woodville	03	1910CST			0	0	0	?	Thunderstorm V	Vind (?)				
W COUVING	High winds from a thunderstorm blew over trees that blocked U.S. 190 near Woodville.													
Newton County	1112	gn willes ite	m a mane	orgionin of	ion o	voi ti	una	. Oloci	170 noar	Woodville.				
N of Deweyville	03	2006CST			0	0	0	?	Thunderstorm V	Vind (?)				
	Hig	gh winds fro	om a thund	lerstorm bl	lew ti	ees de	own ac	cross H	ighway 87 north o	of Deweyville.				
Orange County Bridge City	04	1755CST			0	0	?	?	Thunderstorm V	Vind (?)				
	Hig The	h winds fro high winds	m a thund s blew ove	erstorm ble er a firewo	ew ov rks st	er lar	ge tree	es and o	downed power line ome people inside.	s in Bridge City.				
Jefferson County		1005000					_	_	TT 11 /4 86					
2 NW Beaumont	04	1805CST			0	0	0	0	Hail (1.75)					
	Gol	it ball-size t	nail was re	ported 2 n	nies	northy	vest ar	nd 1 m	ile east of Beaumo	nt.				
Grimes County Navasota	09	1900CST			0	0	0	0	Thunderstorm W	Vind (?)				
	Hig	h winds fro	m a thund	lerstorm da	ımage	ed a h	ome a	nd upro	ooted trees in Nava	isota.				
Goliad County Fannin	12	1740CST			0	0	0	0	Hail (1.75)					
Kerr County	15	1430CST	Short Nari	row	0	6	?	?	Tornado (F0)					
	sust rele	ornado touc tained minor ased. Thre area had ro	r injuries. e mobile h	They wer nomes and	re tre one f	ated for	or min house	or cuts were d	just off Highway and bruises at a lestroyed. Some 3 y damaged.	16. Six persons ocal hospital and 0 other homes in				
Atascosa County	15	2030CST			0	0	?	0	Thunderstorm W	/ind (?)				
	Hig	h winds fro	m a thund	lerstorm se	verel	y dam	naged f	five mo	bile homes at Len	ning.				
Menard and Kimble Counties	15	Evening			0	0	?	?	Flash Flooding					
	Hes	.vv rains se	ent many	small stres	ıms (out of	their	hanks	and flooded road	s and low-water				

Heavy rains sent many small streams out of their banks and flooded roads and low-water crossings over the two-county-area. The San Saba River in Menard County and the Llano River in Kimble County rose out of their banks due to the run-off. One mobile home was washed into the San Saba River at Menard. At least a half dozen persons had to be evacuated, and 100 sheep were drowned.

JULY 1990

		TIME			NO.	OF SONS	EST II	MATED AGE	
PLACE	Đ	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K-1-m0	CHICACLE	4-20m to Car to	COCOL	CHARACTER OF STORM

TEXAS, Southern Cont'd

Atascosa, Bexar, Dimmitt, Frio, Lasalle, Live Oak, McMullen, Uvalde, Zavala Counties

15-16

0 0 6 ? Flash Flooding

Heavy rains began to fall over these counties on the afternoon and evening of the 15th and continued into the morning of the 16th. The heaviest reported was near 14 inches on the southern side of the city of San Antonio in Bexar County. The bulk of the rain fell in the late evening hours and night of the 15th. Totals between 5 and 9 inches were common over other counties listed. While rainfall amounts were very heavy, major flooding was minimal mainly because of an extended, pre-existing drought condition. It took several inches of rain to fill the cracks in the ground. There was some flooding of small streams, creeks, and low-water crossings in the area. High water closed some streets and highways. In San Antonio the flood waters rose into some businesses in the downtown area and on the southside. Several persons had to be rescued from their automobilies and flooded homes. In Frio County, a few people were marooned in the community of Divot where near a foot of rain fell.

Bee, Calhoun, Duval, Goliad, Jim Wells, Live Oak, Nucces, Refugio, Victoria Counties

16-18 Evening

0 0 ? ? Flooding

Thunderstorms dumped very heavy rainfall amounts over portions of these counties. In the western part of Nueces and the northern part of Jim Wells County (Banquette and Orange Grove area), between 10 and 15 inches of rain fell mostly on the evening of the 16th. Flooding lasted through the 18th. Similiar amounts fell over the eastern half of Bee County. The heavy rain extended westward into northern Live Oak County. Five to 8 inches fell between Goliad and Victoria. The run-off of heavy rains in Bee and Goliad counties produced a major rise on the Mission River and water rose into about 21 homes in Refugio. Several families had to be evacuated. U.S. Highway 77 just on the northern side of Refugio was closed with 6 feet of water covering the highway.

In Jim Wells and Duval counties, 10 inches of rain fell in and around Alice, west and southwest to San Diego and Benavides. Twenty residents of a mobile home park in Alice had to be moved to higher ground to escape the flood waters. On the morning of the 17th, a couple had to be rescued by helicopter from the rooftop of their home 8 miles west of Benavides. Forty-three homes in Benavides and San Diego reported water damage. Highway 16 was closed between Freer and Hebbronville for several hours due to flood waters. Several other roads and highways were closed over the above-mentioned counties.

Nearly 15 inches of rain fell in portions of southern Victoria and northern Calhoun counties. Highway and street flooding was serious in the area around Bloomington. Many highways and secondary roads were closed.

Atascosa, Bexar, Dimmitt, Frio, LaSalle, McMullen, Medina Counties

6-8

0 0 ? ? Flash Flooding

Heavy rains continued over southern Texas for the second consective day. Twenty-four hour rainfall amounts ending at 0800 CST on the 17th include several 8- to 10-inch totals. Nine inches fell just north of Pleasanton and in western Medina County. Another 8 inches fell in Dimmitt County just southeast of Carrizo Springs. On the morning of the 16th, major flooding occurred in and around Carrizo Springs. Many roads and low-water crossings were flooded. About 40 families were evacuated because water rose into about 75 homes in the area. Most of the homes were along Carrizo Creek. Subsequent rains in the Carrizo Springs area produced a two-day rainfall total of 15 inches. Several major rivers in southern Texas rose to well above

PLACE	· TIME		NO.	OF SONS	EST!	MATED AGE		JULY 19					
	D LOCAL STANDARD	D LOCAL LENGTH WI		משרויא	-270000	4- 28m 0220	COCODA	CHARACTER OF STORM	·				
ΓEXAS,Southern	Cont'd												
·	A few persons	s had to be	rescued fro	m ca	rs tha	t had b	een dri	rio, Leona, and San Men into flooded areas in the area through the run-off water and ros	. There we				
Val Verde County	18- 19 Noon 18	th		0	0	?	?	Flash Flooding					
	Six inches of rain fell around Comstock on the morning of the 18th which flooded many road in and around the Comstock area. Heavy rains continued to fall and on the 19th up to 11 inches had fallen in some areas that drain into the Pecos River. The Pecos River was up 19 feet on the 19th. Many ranch roads were closed due to high water.												
Bandera County	18- 19			0	0	?	?	Flash Flooding					
	Vanderpool re	eported arou	und 5 inch	es of	rain :	for a 2	4-hour	and flooded low-wa amount ending the m rpool's rainfall total feet but did little dam	orning of t				
Val Verde County	22- 23 Evening			0	0	0	0	Flash Flooding					
	morning hours	s of the 23r he Juno are	d. Five in ea. Many	ches roads	was r	eporte close	d at Lo d due t	e evening of the 22nd ma Alta. The heavy ro high water. The Do in the city of Del Ri	ains extend evils and D				
al Verde County	23- 24 1700CST	•		0	0	?	?	Flash Flooding					
	Heavy rains for	ell in the ex ins to the n	orth closed	l mai	n roac	ds and	highwa	Local rain coupled wi ys in the area. Johns The Pecos River rose	on Draw, a				
Menard County	23 ?			0	0	0.	0	Flash Flooding					
	Heavy rains and run-off closed many roads and highways across the county. Roads were opened the next day on the 24th.												
dwards, Kinney, Real Counties	23 Morning			0	0	?	. ?	Flash Flooding					
	the three-coun	itv area. S	tate Highw	av J.	t at E	sarksda	ile was	ooding and closed man closed due to high wain from the 15th thro	ater. Moo				
Prange County Vidor	30 1510CST	•		0	0	0	0	Hail (0.90)					
efferson County 5 NW Port Arthur	30 1540CST	,		0	0	0	0	Thunderstorm Wind	I (G51)				
			1 . 50					ther Service office at					

TEXAS, Western

Carson County
15 N Panhandle
15 1512CST
1.2
60
0
0
0
Tornado (F0)

	D LOCAL STANDARD	TIME			NO.	OF Sons	ESTIN DAM/	ATED GE				
PLACE		LENGTH OF PATH (MILES)		R-T-MD		0.000000−≻	COCODO	CHARACTER OF STORM				
TEXAS, Western	Co	nt'd							·			
5 N Panhandle 1 N Panhandle 1 E Conway	15 15 15	1520CST 1530CST 1534CST	1.5 1.9	75 100	0 0 0	0 0 0	0 0 0	0 0 0	Hail (1.75) Tornado (F0) Tornado (F0)			
	Pan	handle Fire	Departme	nt reported	golf	hall-s	size hai	l 5 mil	of Panhandle at 1512 CST. These north of Panhandle at 1520 CS of just north of Panhandle. At 150 mile east of Conway. All of the state of Conway.			
Schleicher County 20 E Eldorado	15	0700CST			0	0	2	2	Flash Flood			
	Over 12 inches of rain in Schleicher County sent rivers in the eastern part of the county out of their banks. Many secondary highways were closed until the early morning of the 16th. Fortunately, no injuries or significant damage resulted.											
Hudspeth County 32 ENE El Paso	21	2010CST			0	0	0	0	Thunderstorm Wind (G54)			
	Thu	inderstorm v erver. No	winds gust damage wa	ed to 62 m as observed	oh in 1 d.	northy	west H	udspet	h County, according to a cooperati			
Winkler County Wink	21	2100CST			0	0	0	2	Thunderstorm Wind (G51)			
	A to	elevision we erved.	eatherman	reported v	vind g	gusts 1	to 60 r	nph in	Wink. Minor damage to trees w			
Deaf Smith County Hereford	21	2219CST			0	0	4	2	Flash Flood			
	The Hereford Police Department observed flash flooding in Hereford. The floodwaters caused minor damage to homes in northwestern Hereford.											
Irion County Tom Green County Concho County	23 23 23	0030CST 0040CST 0045CST			0 0 0	0 0 0	0 2 2	0 2 0	Flash Flood Flash Flood Flash Flood			
	Rec in f	urrent thun lash floodir	derstorms ng. Only	produced ominor dam	over 7 age r	inchesulte	es of r	ain in the fl	the central Concho Valley, resulti oodwaters.			
Dallam County Dalhart	26	1635CST			0	0	2	2	Hail (1.75)			
Hartley County 8 SE Dalhart	26	1650CST			0	0	2	1	Hail (0.75)			

8 miles southeast of Dalhart at 1650 CST. No significant damage resulted. Sherman County 4 W Stratford 26 1736CST 0 0 0 Hail (0.75)

The Sherman County Sheriff's Office reported dime-size hail in extreme western Sherman County. No damage was observed.

Oldham County Boys Ranch 0 0 Hail (0.75) 26 1904CST

> The Oldham County Sheriff's Office observed dime-size hail at Boys Ranch. No damage resulted.

	_									JULY 1990			
		TIME			NO. PER	OF SONS	EST I	MATED AGE					
PLACE	O E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	<u>ال</u>	ביים משמבר ביים	4-00mr00000	UTC CATO	CHARACTER OF STORM				
TEXAS, Western Cont'd													
Moore County Four Way	26	1915CST			0	0	0	0	Hail (0.75)				
Potter County 15 NW Amarillo	26				.0	0	0	0	Hail (0.75)				
	Du	The Moore County Sheriff's Office observed dime-size hail at Four Way, 15 miles south of Dumas, at 1915 CST. Fifteen minutes later, dime-size hail fell in northwestern Potter Count No damage was reported.											
Potter County 5 SSW Fritch	26	2055CST			0	0	0	0	Hail (1.00)				
	SK Fri	YWARN sp tch, at 2055	otters repo	orted quart o damage v	er-siz was o	e hail bserv	near l ed.	Lake M	feredith, 5 miles south-sou	uthwest of			
Lubbock County Lubbock	27	1502CST			0	0	2	1	Thunderstorm Wind (C	(63)			
	Do		nds gusted age result	d to 72 m	nph at Lubbock International Airport at 1502 CST. No								
Lubbock County Lubbock	27	1710CST			0	0	3	1	Flash Flood				
	Slow-moving thunderstorms dropped over 1.50 inches of rain on Lubbock in an hour, resulting in flash flooding in the city. The Lubbock Police Department reported minor damage to three vehicles which were stranded in the floodwaters.												
El Paso County El Paso El Paso	27 27	1917CST 2000CST			0	0	2 5	0 2	Thunderstorm Wind (G Flash Flood	62)			
	of t	wnburst wir rain fell as t stroyed and rtunately, no	he thunder a busine	storm pass ss was he	mph ed ov eavily	blew er the dan	through city, naged	gh wes resulting by the	t El Paso at 1917 CST. T ng in flash flooding. One e flood, which stranded	wo inches home was 50 cars.			
Lubbock County Lubbock	27	2050CST			0	0	2	2	Flash Flood				
	An The	other slow-re Lubbock I	noving thu EOC repor	inderstorm ted no sign	passe nificar	ed ove nt dan	r Lubl nage v	oock, r	esulting in additional flash s event.	flooding.			
Midland County 1 S Midland	28	1515CST			0	0	2	2	Flash Flood				
	thu	e public ar inderstorm j nor damage.	ust south o	xas Depar of Midland	tment The	t of e floo	Public d, whi	: Safet ich last	y reported flash floodin ed until 1815 CST, result	g from a ed in only			
Lipscomb County 8 SW Lipscomb	28	2055CST			0	0	0	0	Flash Flood				
_	Fla	ish flooding	occurred	in southwe	stern	Lipso	comb (County	. No damage resulted.				
Lubbock County 3 SE Slaton	29	1524CST			0	0	3	1	Thunderstorm Wind (G	i54)			

29 1524CST 3 Thunderstorm Wind (G54) Downburst winds at 1524 CST caused minor damage to outbuildings southeast of Slaton, according to the Slaton Police Department.

JULY 1990 NO. OF PERSONS EST I MATED TIME Đ LOCAL LENGTH OF Path WIDTH OF PATH CHARACTER OF STORM PLACE STANDARD (MILES) (YARDS)

	<u> </u>		······································			b	Ÿ						
TEXAS, Western	n Co	nt'ḋ											
Brewster County Alpine	29	1550CST			0	0	2	2	Flash Flood				
	A t No	hunderstorn significant	produced damage re	l flash floc sulted.	ding	in Al _l	pine, a	ccordi	ng to the Alpine Police Department				
Castro County 9 S Dimmitt	29	1640CST			0	0	0	0	Hail (0.88)				
	The CS	Castro Cou L. No dam	inty Sheri: age was re	ff's Office ported.	obse	rved r	nickel-	size ha	uil 9 miles south of Dimmitt at 1640				
El Paso County El Paso	29	1715CST			0	0	2	2	Flash Flood				
		sh flooding ulted.	was repo	rted in th	e nor	thwes	stern s	section	of El Paso. Only minor damage				
Runnels County Ballinger	30	1445CST	1.2	65	0	0	4	1	Tornado (F1)				
	The rep	e public rep orted damag	orted a to e to two b	rnado in l ouildings a	Ballin Ind a	ger at tree u	t 1445 proote	CST.	The Ballinger Police Departmen owntown Ballinger.				
Schleicher County Sutton County Crockett County	30 30 30	2158CST 2210CST 2215CST			0 0 0	0 0 0	2 2 2	2 1 0	Flash Flood Flash Flood Flash Flood				
	The	Train-effect thunderstorms passed over the southern Concho Valley, resulting in flash floodin The floodwaters closed many secondary highways until midday on the 31st; however, only mindamage and no injuries were reported.											
UTAH				_									
Wasatch County	01	1400MST			1	0	0	0	Lightning				
	Lig	htning struc	k and kill	ed a man s	sitting	at a	picnic	table a	at Strawberry Reservoir. (M290)				
Utah County Provo	01	1715MST			0	0	4	0	Thunderstorm Wind (G62)				
Castro County 9 S Dimmitt El Paso County El Paso Runnels County Ballinger Schleicher County Sutton County Crockett County UTAH Wasatch County Provo Salt Lake County Utah County Utah County Tooele County Ouchesne County 2 S Roosevelt	Mic	croburst win	ds knocke	d down tr	ees in	to po	wer li	nes and	d car windshields.				
Salt Lake County Utah County Tooele County	01 02 02	1759MST 1505MST 1900MST			0 0 0	0 0 0	3 2 5	0 0 0	Thunderstorm Wind (G53) Thunderstorm Wind (G54) Thunderstorm Wind				
•	Mic in t	Microburst winds of unknown speeds knocked over three tractor-semitrailers along Interstate 8 in the Delle area about 20 miles west of Grantsville.											
Duchesne County 2 S Roosevelt	08	1450MST	Short	5	0	0	0	0	Tornado (F0)				
		ornado was nage.	reported (to have m	omen	tarily	touche	ed dow	on a golf course. There was no				
Kane County	15	1640MST			0	0	5	0	Thunderstorm Wind (G65)				
	Mic	croburst win	ds at Dan	gling Rop	e Ma	rina c	on Lak	e Pow	rell (about 40 miles above the Gler				

TIME

NO. OF PERSONS

JULY 1990

\	1 1	LIME]		PLN	3043	DAN	TOL					
PLACE	D-E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	Ry-1-Find	CHOOC E		CEOLA	CHARACTER OF Storm				
UTAH Cont'd													
Utah County Payson	24	0100MST	,		0	0	3	3	Hail (1.00)				
	An early-morning thunderstorm brought large hail and up to 0.78 inch of rain in 45 minutes parts of Utah County.												
Davis County Layton	24	1500MST			0	0	4	4	Hail (1.00)				
	Hai	Hail up to 1-inch in diameter caused extensive damage to trees and gardens.											
Carbon County Wellington	24	1848MST			0	0	3	3	Hail (0.75)				
VERMONT													
Caledonia County East Burke Lamoille County	04 04	1400EST 1510EST-			0	0	6	5	Lightning				
Washington County		1700EST			0	0	6	3	Flash Flooding				
Madbush Waterbury Northern Sections	04 04 04	1700EST 1700EST 1710EST-			0	0	5 4	0	Lightning Lightning				
Washington County		2135EST			0	0	7	0	Flash Flooding				
Warren Franklin County	04 04	1835EST 2010EST- 2359EST			0	0	2 5	2	Hail (0.75) Flash Flooding	•			
Washington County Warren Orange County	04	2245EST	•		0	0	3	3	Thunderstorm Winds				
Braintree Randolph	04 04	2330EST 2330EST			0	0	2	3 0	Thunderstorm Winds Thunderstorm Winds				
Windham County Londonderry Population County	05	0035EST			0	0	2	2	Thunderstorm Winds				
Bennington County Peru	05	0035EST			0	0	2	2	Thunderstorm Winds				
Readsboro	05	0055EST			0	0	2	0	Thunderstorm Winds				
Searsburg Washington County	05	0055EST			0	0	2	2	Thunderstorm Winds				
Calais Woodbury	05 05	0135EST 0135EST			0	0	4 2	2 2	Thunderstorm Winds Thunderstorm Winds				
Caledonia County Countywide	05	0200EST- 0300EST			0	0	4	3	Flash Flooding				
Washington County North Montpelier	05	0345EST			0	0	5	0	Dam Break				

Heavy rain from "training" thunderstorms produced rapid and intense flooding across northern Vermont. Rainfall amounts of 3 to 6 inches over 2 to 3 hours were common. Most small streams in Caledonia, Lamoille, Washington, and Franklin counties reached flood levels. Many roads and a few bridges were washed out during the event.

Main stem river flooding was confined to the Lamoille and Little River. Between Stowe and Moscow, in the headwaters of the Little River, a campground was devastated by several feet of

At North Montpelier Pond, high water caused a portion of the dam's embankment to fail. As a result a huge section of Factory Street was washed out and the hydroelectric plant shut down. Strong gusty winds also took down trees, tree limbs, and power lines.

										JULY 1990
	į	TIME			NO.	OF SONS	ESTIN DAMA	ATED GE		
PLACE	D B E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	Ŕ-1-mΩ	-2-10000	4- 221100200	COCOCO	CHARACTER OF STORM	
VERMONT Cont	.'d									
Washington County Lamoille County	23	1320EST			0	0	6	5	Flash Flooding	
Chittenden County Addison County	23	2118EST						•		
	Thi of	understorms the small m	with heav ountain str	y rain agai eams.	n rac	ked n	orthern	Verm	ont. Flooding occurred	along many
VIRGINIA										
Spotsylvania County	01	0040EST			0	0	0	0	Thunderstorm Winds	3
	Tre	es were do	wned.						•	
Washington County Damascus	01	1300EST	* 40		0	0	3	0	Lightning	
	Lig out	htning struct power to 1	k an electi ,770 custo	rical power mers.	statio	on in	Damas	cus cat	using \$21,000 damage a	nd knocking
Arlington County Fairfax County	01	1300EST- 1445EST			0	0	3	0	Thunderstorm Winds Hail	\$
	See	details belo	ow.							
Fairfax County Tysons Corner Arlington County Fairfax County	01	1335EST			0	0	0	0	Hail (0.75)	
Rosslyn Mount Vernon Vienna	01	1300EST- 1400EST			0	0	3	0	Thunderstorm	
Dunn Loring	at t	Arlington C he Key Brid es fell onto ages.	ounty, tree lge (Rossly houses in	es were dov yn), Nation Vienna a	wned al Ai and D	on port rport unn	ortions (DCA Loring	of Geo), and . Son	orge Washington Memo Mount Vernon. In Fair ne 45,000 were affecte	rial Parkway rfax County, d by power
Fairfax County	01	1445EST			0	0	3	0	Thunderstorm Winds	i
	Tre	es were blo	wn down	onto house	s in 1	he ea	stern p	art of	the county.	
Brunswick County Dolphin	01	1500EST			0	0	0	3	Hail	
	An	isolated, sr	nall thund	erstorm car	used	about	50% 1	oss to	tobacco crops in the D	olphin area.
Hanover County Henrico County Charles City County City of Richmond	01	1530EST- 1600EST			Ó	0	4	0	Thunderstorm Winds Hail	.
Hamisa C		details belo		•						•
Henrico County Lakeside	01	1530EST- 1545EST	•		0	0	0	0	Thunderstorm Winds	;

Trees were reported down.

JULY 1990

Г					NO.	OF	FSTIM	ATED	JULY 1990
		TIME			PĚŔ	SONS	ESTIM DAMA	GE	
PLACE	D-E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K-L-MD		Р. СОРИМ	Cocco	CHARACTER OF STORM
VIDCINII A. Comt?	.1		•						
VIRGINIA Cont'd Henrico County City of Richmond	01	1530EST- 1600EST			0	0	4	.0	Thunderstorm
	Nu whi	merous tree ich were in	s were dov eastern sec	vned. Tweetions of R	enty- lichm	five thond a	ousand nd Her	i home irico C	es were left without power, most of County.
Henrico County 4 NW RIC	01	1600EST			0	0	0	0	Hail (1.00)
Hanover County	01	1600EST			0	0	0	0	Thunderstorm Winds
	Wi	nds estimate	ed at 60 m	ph in the v	vestei	n par	of the	coun	ty.
Charles City County	01	1555EST- 1600EST			0	0	3	0	Thunderstorm Winds Hail (0.75)
	The out	ee-quarter-i ages resulte	inch hail w d from tre	as reported	d in t	he con lines	inty al	ong w	ith numerous downed trees. Power
Buckingham County	01	1615EST			0	0	0	0	Thunderstorm Winds
		riff's depar nty.	tment repo	rted strong	g win	ds esti	mated	to 60	mph blew down several trees in the
Stafford County	01	1410EST- 1425EST			0	0	0	0	Hail (1.75) Thunderstorm Winds
	The line	ere were sev es were repo	veral report orted down	ts of 1-incl	h to g st-cer	golf ba itral p	ll-size art of	hail w	vithin the county. Trees and power unty.
Spotsylvania County City of Fredericksburg	01	1444EST			0	0	4	0	Thunderstorm
4 N Fredericksburg	Tre in t	es and powe he Frederic	er lines we ksburg are	re downed a. Trees t	by wo	inds e	estimate o at lea	ed ove ast two	r 50 mph. Some 15,000 lost power o cars in Fredericksburg.
Stafford County 1 SW Quantico	01	1446EST			0	0	0	0	Hail (0.75)
	Thr	ee-quarter-i	nch hail w	as reporte	d at t	he U.	S. Mar	rine Co	orps Airport (NYG).
King George County	01	1440EST			0	0	0	0	Thunderstorm Winds
	Tre	es were rep	orted dow	ned.					
Cities of Suffolk and Chesapeake	01	1445EST- 1530EST			0	0	0	0	Hail
	See	details belo	ow.						
4 W Suffolk 8 NW Suffolk 9 SW Chesapeake 4 S Chesapeake	01 01 01 01	1445EST 1450EST 1450EST 1515EST- 1530EST			0 0 0	0 0 0	0 0 0	0 0 0 0	Hail (1.00) Hail (2.50) Hail (1.00) Hail (2.00)
Middlesex County	01	1625EST			0	0	4	0	Hail (1.25) Thunderstorm Winds Lightning

The Sheriff reported numerous trees down and half-dollar-size hail, with fires caused by lightning. A 100-year-old pecan tree with a trunk diameter of 8 feet was toppled onto a van in Syringa.

						_	,		JULY 1990
		TIME			NO. PER	OF SONS	ESTIM DAMA	ATED GE	
PLACE	Đ	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K-1-mo	CHINGC. Z.1		COOPA	CHARACTER OF STORM
	l		<u> </u>	<u> </u>	<u> </u>		<u>' </u>		
VIRGINIA Cont'	đ								
Isle of Wight County Rescue	01	1715EST			0	0	3	0	Thunderstorm Winds
	Win	nds attribute o houses ca	ed to a mic using cons	eroburst fla siderable d	ttene amag	d abou	ut 25 tr ower ou	ees in itages	the Rescue area, some of which fell affected some 2,000 in the county.
Northampton County	01	1730EST			0	0	3	0	Thunderstorm Winds
	A f	few trees an	d power li	nes were d	lowne	ed.			
City of Newport News	01	1710EST			0	0	0	0	Funnel Cloud
	An wes	observer at st of the site	Fort Eusti which mo	s (6 miles a	north	west c	of New ad east	port N of the	ews) reported a funnel cloud 2 miles station. No damage was reported.
City of Virginia Beach	01	1735EST- 1750EST			0	0	0	4	Thunderstorm Winds Hail
·	See	details belo	ow.	`			•		nau
12 N Virginia Beach	01	1735EST			0	0	0	0	Thunderstorm Winds
	Gu	sts to 63 mp	h were re	ported at S	outh	Island	d of the	e Ches	sapeake Bay Bridge Tunnel.
6 NE Virginia	01	1750EST			0	0	0	0	Thunderstorm Winds
Beach	Gu	sts to 69 mp	h reported	d from Cap	е Не	nry.			
15 S Virginia Beach	01	1735EST			0	0	0	4	Hail (2.50)
	Sor hail	ne 600 acre Istorm. Ha	es of corn	and soybe	eans:	in the marble	souther to ter	ern pa inis ba	art of the city were destroyed by a all-size.
City of Portsmouth	01	1745EST			0	0	3	0	Thunderstorm Winds
	Tre	es limbs we	ere down v	with power	outa	ges.			
City of Suffolk	01	1750EST			0	0	3	0	Thunderstorm Winds Lightning
	Ma	ny power o	utages occ	urred and	lightr	ning s	truck a	house	2.
Culpeper County Culpeper	05	1329EST- 1340EST			0	0	0	0	Thunderstorm Winds Hail (0.75)
	Tre 1,4	es were dov 00 customer	vned at sev	veral places fected by p	s with	in the	e count	y. Dir	me-size hail fell at Culpeper. About
Fairfax County	-,-			-			.		
Arlington County City of Manassas City of Alexandria Prince Willliam	05	1545EST- 1715EST			0	1	4	0	Thunderstorm Winds
County	See	details belo	ow. Abou	it 90,000 v	vere a	iffecte	ed by p	ower (outages as a result of the storm.

Strong winds blew trees down near Lake Braddock.

05 1545EST

1 NE Burke

Thunderstorm Winds

JULY 1990

PLACE PLACE TIME LOCAL STANDARD PATH PATH PATH PATH PATH PATH PATH PAT	
VIRGINIA Cont'd Prince William County Manassas 05 1650EST 0 0 3 0 Thunderstorm W Trees and power lines were downed in various parts of the city. Winds were recat a power company site near Manassas. Trees and power lines were report several locations in Prince William County. Burke 05 1703EST 0 0 0 0 Thunderstorm W Trees were reported down. Fairfax County Centreville 05 1650EST 0 1 4 0 Thunderstorm W	
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County Manassas 05 1650EST 0 0 3 0 Thunderstorm W Trees and power lines were downed in various parts of the city. Winds were recat a power company site near Manassas. Trees and power lines were report several locations in Prince William County. Burke 05 1703EST 0 0 0 0 Thunderstorm W Trees were reported down. Fairfax County Centreville 05 1650EST 0 1 4 0 Thunderstorm W	
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at a power company site near Manassas. Trees and power lines were report several locations in Prince William County. Burke 05 1703EST 0 0 0 Thunderstorm W Trees were reported down. Fairfax County Centreville 05 1650EST 0 1 4 0 Thunderstorm W	'inds
Trees were reported down. Fairfax County Centreville 05 1650EST 0 1 4 0 Thunderstorm W	corded at 84 mph ed down also in
Fairfax County Centreville 05 1650EST 0 1 4 0 Thunderstorm W	inds
Centreville 05 1650EST 0 1 4 0 Thunderstorm W	
	'inds
There were strong winds at several places in the county. Trees were downed an sheared off by straight-line winds. Eight homes caught fire from lightning barn containing antique cars burned to the ground after being struck by lightning was estimated at \$300,000. Five miles southeast of Chantilly, a tree thunderstorm winds onto a car, trapping and slightly injuring a woman.	Id some had tops In Centreville, a g. Total damage was toppled by
City of Alexandria 05 1710EST- 1715EST 0 0 0 Thunderstorm W	inds
Trees were reported downed.	
Arlington County 05 1720EST 0 0 0 Thunderstorm W	inds
Gusts to 51 knots were reported at Washington National Airport (DCA).	
Spotsylvania County 05 1600EST- Chancellorsville 1700EST 0 0 0 Thunderstorm W	inds
An amateur radio operator reported several trees downed; some trees had top straight-line winds. Thousands of customers were affected by power outages.	os broken off by
Clarke County	r 1
Berryville 05 1625EST 0 0 ? 0 Thunderstorm W	ings
Winds were estimated at 60 mph.	
Fauquier County 05 1555EST- 1635EST 0 0 ? 0 Thunderstorm W	inds
See details below.	
Delaplane 05 1635EST 0 0 0 Thunderstorm W	inds
Winds were estimated up to 70 mph.	
·	inds
Remington 05 1555EST 0 0 0 Thunderstorm W Warrenton 05 1620EST 0 0 0 0 Thunderstorm W	inds
Large tree limbs were reported downed at both locations.	
Fairfax County Springfield 05 1630EST 0 0 0 Hail (0.75)	
City of Fredericksburg 05 1636EST-Stafford County 1700EST 0 0 0 Hail (0.75)	

		TIME			NO.	OF SONS	EST II	MATED AGE	
PLACE	D A E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K L L E D	I N J D RELD		WTOZOU	CHARACTER OF Storm

VIRGINIA Cont	'd							•	
	dov affe	Fredericksbur vned by falli ected 19,000. nove trees fro	ng trees The Sta	and limbs ate Highwa	down Wi y De	ed in t nds ir partm	the dove the a ent est	vntowi rea es imated	n area. In Stafford, power lines were timated at 60 mph. Power outages I cleanup costs at around \$12,000 to
Stafford County Stafford	05	2030EST			0.	0	4	0	Lightning
	A l flar	ouse was dan ed up again	maged by the next	a lightnin morning e	ig-cau ngulfi	sed fi	re. The hous	ne fire e.	was believed to be extinguished but
Brunswick County Lawrenceville	08	Evening			0	0	3	0	Thunderstorm Winds
	A f	actory buildi	ng under	constructi	on w	as hea	vily d	amage	d by thunderstorm winds.
Mouth of Chesapeake Bay	09	0555EST			0	0	0	0	Waterspout
	An	observer at l	Langley 1	Field (LFI)) герс	orted a	water	rspout	east of the station.
Orange County Rhoadsville	09	1500EST			0	0	0	0	Thunderstorm Winds
	Thu not	inderstorm w be confirmed	rinds dow d.	ned trees	and ca	aused	some p	ower	outages. Reports of a tornado could
Amherst County Allwood	09	1800EST	0.1	10	0	0	3	0	Tornado (F0)
	An a fu	apparent torn	nado dam nd heard	aged sever a loud roar	al far at th	m bui e sam	ldings e time	and tr The	ees. An eyewitness on the farm saw storm was over in about 30 seconds.
Halifax County									÷

South Boston Volens, Bethel Centreville Halifax Clay Mills

09 1900EST 0 0 3 0 Thunderstorm

Numerous trees were downed in South Boston, Volens, Bethel, Centreville, and Halifax. Trees falling onto power lines caused outages to some 3,300 homes. Power company official said the heaviest damage occurred at Clay Mills where roof and property damage occurred along with the downed trees.

City of Hopewell

09 1900EST

3

Thunderstorm Winds

A large tree fell onto two houses damaging porches and roofs.

Mouth of Chesapeake Bay

0616EST-0632EST 10

0 0 0 Waterspout

An observer at Langley Field (LFI) reported a waterspout estimated 15 miles east of LFI that moved north.

Louisa County Byrd Mill Yanceyville

1600EST-10 1700EST

0 Thunderstorm Winds Lightning

In Yanceyville, two large trees were blown onto a house. About a dozuprooted. In Byrd Mill, a cow and three calves were killed by lightning. About a dozen other trees were

				CITODO					
		TIME			NO.	OF SONS	ESTIN DAMA	AATED	JULY 1990
PLACE	O-60-E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	R-L-I-W		<u> </u>	CECOEN	CHARACTER OF STORM
VIRGINIA Cont'e	d								
City of Roanoke Roanoke County Montgomery County Roanoke Blacksburg	10	1600EST- 1800EST			0	2	4	0	Lightning
Orange County	by and	thousand w lightning as burns. Lig htly injured	the was he htning str	olding an u uck two ho	umbre juses i	lla on n Roa	na gol unoke o	f cours	lightning strikes. A man was struck se in Blacksburg. He sustained cuts \$70,000 damage. One woman was oris.
Gordonsville	10	Evening			0	0	3	0	Thunderstorm Winds Lightning
	Thu the	inderstorm resulting fi	winds dov re destroy	vned trees ed the barr	and o	aused 3,000	some bales	power of hay	outages. Lightning struck a barn;
Franklin County	10	Evening			0	0	3	0	Thunderstorm Winds
	At cau	least two h sed. Severa	ouses wer al trees we	e partially ere downed	unro I.	ofed 1	by hig	h wind	ds. About \$20,000 in damage was
Mecklenburg County 1 SW Chase City	10	2015EST	?	?	?	?	?	?	Tornado (F?)
	The	Virginia E	OC report	ted a torna	do to	uched	down	with t	rees knocked over.
Culpeper County City of Culpeper	11	1400EST- 1500EST			0	0	3	0	Thunderstorm Winds Lightning
	fell and \$10	onto a car. roofs of b ,000. A c	Widespre buildings. hurch stee	ad tree dai A house ple was to	nage lost oppled	occuri its tin I by v	red in a roof; winds.	Culpep that a Seve	wheel trees and limbs; one large tree ber County as well as damage to cars and resultant water damage totaled ral fires were started by lightning. city of Culpeper.
Spotsylvania County 2 S Chancellor	11	1350EST			0	1	3	0	Thunderstorm Winds Hail (0.75)
	repo dan serv	orted in the	northern p ed to trail inators sai	ers in a mand the control of the wind	ounty obile ds we	/. Tw home re pre	o hous e park obably	se fires as tre the re	mated up to 60 mph, with large hail were caused by lightning and minor es fell on them. Local emergency esult of a microburst. A man was or.
Bedford County 4 SE Radford	11	1400EST			0	4	0	0	Thunderstorm Winds
	A c	amper traile	er was flip vinds, slig	ped over a	at Sm ng its	ith M four	ountair occupa	n Lake ants.	(4 miles southeast of Radford) by
									·

Several large oak trees were snapped off at eye level and uprooted; some fell onto two houses, damaging them, and another fell onto a car, totaling it. The trees also pulled down power lines.

0

Thunderstorm Winds

Pittsylvania County Motley

11 1430EST

[T	TIME			NO.	OF SONS	EST IN	ATED		JULY 1990
	P	LOCAL	LENGTH	міртн	K	1			CHADACTED	
PLACE	Ē	STANDARD	PATH (MILES)	PATH (YARDS)	OM	Domo	- 	ODOOO	CHARACTER OF Storm	
VIRGINIA Cont	'd				-	•				
Greene County Albemarle County 1 W Stanardsville	11	1500EST-								
2 NW Advance Mills		1700EST		•	0	0	3	0	Thunderstorm Win Flooding	nds
	Res	sultant flood	ling washe	xd out a bri	dge ii	n near	rby Alb	emark	ounty between 1500 are County about 2 mil le west of Stanardsvi	es northwest of
Franklin County	11	1510EST			0	0	0	0	Thunderstorm Wi	nds
	Hig	gh winds do	wned nun	nerous tree	s in t	he eas	stern ha	alf of t	he county.	
Spotsylvania County										
Fredericksburg	11	1533EST- 1545EST	•		0	0	3	0	Thunderstorm Wi	nds
	. Nu	merous tree	s and pow	er lines we	ere re	porte	d down	ı. Wir	nds were estimated a	t 60 mph.
Westmoreland Count Colonial Beach	ty 11	1650EST		,	0	0	. ?	0	Lightning	
	Lig	htning-caus	ed fires w	ere reporte	xd.					
City of Fredericksburg	11	1600EST			0	0	0	0	Hail (0.88)	
Caroline County	11	1700EST- 1800EST			0	0	3	0	Thunderstorm Win	
	La	•	of trees v	were down		_	power	_	ges throughout the co	•
Cities of Hopewell Petersburg	11	1700EST			0	0	3	0	Thunderstorm Win	nds
Petersburg Colonial Heights		es fell onto ee cities.	power lin	nes, downi	ng th	em ar	nd caus	ing ou	itages to some 10,00	0 homes in the
Prince George County	11	1730EST- 1745EST			0	0	3	0	Thunderstorm Win	nds
	Wi	nds estimate	ed at 60 m	ph blew d	own a	a few	trees.			
Lunenburg County 1 N South Hill	11	1800EST	0.1	10	0	0	3	0	Tornado (F0)	
	A p	oossible torn the vicinity.	ado flippe	ed a mobile	home	e over	destro	ying it	t; several trees were a	lso snapped off
Brunswick County	11	1825EST- 1830EST			0	0	3	0	Thunderstorm Wi	nds
	Nu	merous tree	s and pow	er lines w	ere do	owned	l by wi	nds es	timated at more than	60 mph.
Prince George County	11	1830EST- 1835EST	•		0	0	0	0	Thunderstorm Wi	nds

Several trees were downed.

JULY 1990

		TIME			NO.	OF SONS	EST II	MATED AGE	
PLACE .	D	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	R-1-1-F	T Desuit	Орш <u>к</u> у-ү	WTOWN	CHARACTER OF STORM

						Б	Y		
VIRGINIA Cont'	đ								
Southeastern Virginia	11	1600EST 2300EST							Hail, Flooding Thunderstorm Winds Lightning
•	Wie	despread seve	re weath	er occurred	d on	the ev	ening	of the	11th. Details follow.
Essex County Tappahannock	11	1640EST	•		0	0	0	0	Hail (1.50) Thunderstorm Winds
	Tre	es downed an	d Ping-P	ong ball-s	ize h	ail wa	s repo	rted.	
Westmoreland County	11	1735EST			0	0	0	0	Hail (1.50)
	Nu	merous report	s of wali	nut-size to	1 and	d 1.5-	inch-s	ize hai	1.
Richmond County Warsaw	11	1720EST			0	0	0	0	Hail (1.50)
Middlesex County	11	1740EST			0	0	0	0	Hail (1.00)
	One	e-inch size ha	il covere	d the grou	nd in	the n	orther	n part	of the county.
City of Newport News	11	1750EST	•		0	0	0	0	Thunderstorm Winds
	The	ere were gusts	to 67 m	ph at Patri	ick H	enry l	Field ((3 mile	s north of Newport News
Surry and James City Counties City of Williamsburg	11	1640EST- 1715EST			0	0	0	0	Hail (1.00) Thunderstorm Winds
	See	details below	7.		•				Thunderstorm winds
Surry County Carsely	11	1640EST			0	0	0	0	Thunderstorm Winds
	Tre	es were repor	ted dowr	ned.					
James City County 2 W Williamsburg	11	1700EST- 1715EST			0	0	0	0	Hail (1.00)
City of Williamsburg	11	1700EST- 1715EST			0	0	0	0	Hail (1.00)
Surry County 5 W Surry	11	1715EST			0	0	0	0	Hail (1.00)
Middlesex County Saluda	11	1720EST	•		0	0	3	0	Lightning
	A h	ouse was stru	ck by lig	ghtning and	d the	Sherif	ff's O	ffice w	as damaged by lightning.
City of Newport News	11	1730EST			0	0	0	0	Thunderstorm Winds
	Tree	es were down	ed in no	rthern Nev	vport	News	i.		
Isle of Wight County 5 N Raynor	11	1735EST		•	0	0	0	0	Thunderstorm Winds
	Larg	ge trees were	downed.						

		TIME			NO.	OF SONS	EST IN	ATED GE	JULY 1990
PLACE		صنعاب	ביים ביים	о осошость	CORODA	CHARACTER OF STORM			
VIRGINIA Cont'o	d								
Mathews County Hudgins Mathews	11	1746EST- 1753EST			0	0	4	0	Lightning
	Two	o homes we	ere struck	by lightnin	g cau	sing a	a total	of \$65	5,000 damage.
Essex County 5 W Tappahannock	11	1808EST			0	0	0	0	Hail (1.00)
Gloucester County Gloucester	11	1800EST			0	0	0	0	Hail (1.00) Thunderstorm Winds
	Tre	es were dov	wned and	one-inch-si	ze ha	il гер	orted.		
Northampton County City of Virginia Beach	11	1830EST- 2245EST			0	0	5	0	Lightning Flooding
Southampton County	At 190 ligh Pov 4 fe	1830 EST s 00 and 224: atning. Lig wer outages eet deep in	evere light 5 EST, over thining de affected 2 some areas	ning dama ver 250 re tection equ 5,000 hom s, flooding	ge wasidend ipme ips. home	s reported in the second secon	orted the construction of	hrough ity of 1 2,400 ches of ing pe	out Northampton County. Between Virginia Beach were damaged by 3 strokes per hour in these storms frain fell, with water accumulating ople in cars in Virginia Beach.
Courtland	11	1905EST			0	0	0	0	Thunderstorm Winds
	Tre	es were dov							
City of Virginia Beach	11	1900EST- 2245EST	•		0	0	4	0	Flooding
·	rain	n fell, causii	ng 2 to 4 f	eet of wate	r to c	over 1	many s	treets i	Virginia Beach. Five to 9 inches on the urban areas of the city. Many to homes and other buildings.
Nottoway County Burkeville	11	2200EST			0	0	4	0	Lightning
	Lig	htning set a	house afi	re, destroy	ing it	and	causing	g an es	stimated \$120,000 damage.
Cities of Norfolk Portsmouth	12	0100EST- 0200EST			0	0	3	0	Lightning
	Sev the		igs were sl	ruck by lig	htnin	g in l	both ci	ties, ca	ausing moderate damage to a few o
Shenandoah County	12	1500EST- 1800EST				0	4	0	Flooding
Frederick County Edinburg					0				Lightning
Frederick County	obs	erver at Wo	oodstock r eported ale	eported 4 in one with a	d blo	cked	ain bei	ween	Lightning eported at Edinburg. A cooperative 1500 and 1740 EST. Small strean losings. Several homes were struct

Quarter-size hail and winds gusting to 58 mph were reported by spotters.

JULY 1990

<u> </u>		TIME		<u> </u>	NO. PER	OF	EST I	MATED AGE		JUL
PLACE	D	LOCAL STANDARD	_ _0F'' "0F'''		Contract - A	CMWCLE	a.acOo.uss->	COCOCO	CHARACTER OF STORM	
VIRGINIA Cont'	d									
Fairfax County	12	1637EST- 1800EST			0	0	0	0	Thunderstorm W Flooding	inds
	See	details belo	ow.							
2 NE Arcola	12	1637EST			0	0	0	0	Thunderstorm W	inds
	Wi	nds to 66 m	ph 2 miles	northeast	of A	rcola	(WSF	O WB	C).	
Reston, Herndon, Great Falls	12	1700EST			0	0	0	0	Flooding	
	Stre	eet flooding	was repor	ted, with	trees	blocki	ing a 1	road in	the Great Falls are	a.
Frederick County Winchester	12	1600EST- 1630EST	.**		0	0	3	0	Lightning	
	For	ır houses w	ere struck	by lightnir	ng an	d dam	aged.			
Fauquier County 2 SE Delaplane	12	1558EST	?	?	?	?	?	?	Tornado (F?)	
	A s	severe weath	er spotter	reported a	torn	ado.				
Brunswick Mecklenburg Lunenburg Essex Counties	12 See	1620EST- 1750EST			0	0	0	0	Thunderstorm W	inds
Essex County	300	uctaris ocic	, w.							
Tappahannock	12	1620EST			0	0	0	0	Thunderstorm W	inds
	Tre	es were dov	vned.							
Mecklenburg County Boydton	12	1710EST- 1730EST			0	0	0	0	Thunderstorm W	inds
	Tre	es were rep	orted down	ı.						
Brunswick County 1 N Meredithville	12	1720EST- 1750EST			0	0	0	0	Thunderstorm W	inds
	Nu	merous trees	were dow	vned.						
Lunenburg County Kenbridge	12	1730EST			0	0	3	0	Thunderstorm W	inds
	Sev	eral large tr	ees were d	lowned, or	ne of	which	i fell o	onto a l	nouse.	
City of Petersburg	12	1800EST			0	0	3	0	Thunderstorm W	inds
	Tre	es toppled o	onto power	lines caus	sing c	outage	s to se	veral h	undred residences.	
Prince George County	12	1800EST			0	0	3	0	Thunderstorm W	inds
	Elev	ven trees we	ere reporte	d knocked	dow	n acro	ss roa	ds and	power lines.	

	<u> </u>			Γ	LNO	OF	ECTI	MATER		JULY 1990
		TIME			PER	SONS	├ ──	AGE AGE		
PLACE	DAO-E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	P C	STATE OF THE PERSON OF THE PER	9-00-00-Y	COOPA	CHARACTER OF STORM	
LID CONTA C	•	l		L	1	L	L	ll		
VIRGINIA Cont's Sussex, Surry, Southampton	a									
Greensville Isle of Wight Counties	12	1713EST- 1800EST			0	0	0	0	Thunderstorm Winds	l.
	See	details belo	ow.						Hail	
Sussex County		1713EST			0	0	0	0	Thunderstorm Winds	!
		es were do	wn in the v	western na	•	•	•			
Surry County				· · · · · · ·						
Surry County Cabin Point	12	1730EST- 1740EST			0	0	0	0	Thunderstorm Winds	ı
	Tre	es downed	at Cabin P	oint (north	west	part	of the	county) also southeast part of	the county.
Southampton County				·	_	•	_	_		•
Courtland	12	1750EST- 1755EST			0	0	0	0	Hail (1.00) Thunderstorm Winds	:
	Tre	es were dov	vned.		•					
Isle of Wight County		400077077			•	•	•	_		
Walters	12	1800EST	4		0	0	0	0	Thunderstorm Winds	
Caramarilla Caramba		es were dov	wned.		0	0	0	0	Thunderstorm Winds	
Greensville County		o reports of	f downad t	roog in the	•	-	•	•		ı
City of Virginia Beac		o reports of	downed	iees in the	west	em þ	art or	me con	mty.	
12 N Virginia Reach	12	1747EST			0	0	0	0	Thunderstorm Winds	
ikani			winds we	•	•	-	_	-	the Chesapeake Bay Bri	
Northumberland Cou 1 W Reedville		•	WIIIGS WC	ie reportee	at th	000	medi 1916	and Or	ine chosipeake bay bri	age rainier.
1 W Reedville	12	1815EST			0	0	0	0.	Thunderstorm Winds	ŀ
	Tre	es were do	wned.						•	
Fairfax County Herndon	12	1840EST			0	0	4	0	Lightning	
	A 1	ightning-ini	tiated fire	destroyed	a hou	ıse in	Herno	don, w	ith damage estimated at	\$250,000.
City of Williamsburg		-		•	0	0	3	0	Lightning	
	Lig	htning strik	es caused	power out	ages 1	o 3,0	000 res	idence	s.	
City of Virginia				•						
Beach	12	1900EST- 2000EST	•	•	0	0	4	0	Lightning	
	Ma	ny lightninį	g strikes ir	northern	Virgi	nia B	each c	aused e	extensive damage.	
City of Virginia Beac	:h									
12 N Virginia Beach	12	1940EST			0	0	0	0	Thunderstorm Winds	.

South Island of the Chesapeake Bay Bridge Tunnel recorded 50 knot winds.

		TIME			NO.	OF SONS	EST!	MATED AGE		JULY 1990
PLACE	D	LOCAL STANDARD	I OF I O		Carrotte	4-00m00000	CEOTO	CHARACTER OF STORM		
VIRGINIA Cont	'd									
City of Chesapeake	13	2010EST			0	0	0	0	Funnel Cloud	
	Pub	olic reported	l a funnel	cloud over	the r	orthe	rn par	t of th	e city.	
Campbell County Boonsboro	14	1000EST			0	0	3	0	Lightning	
	Lig	htning struc	ck a power	station ca	using	outag	ges to	1,100	for several hours.	
Patrick County Franklin County 1 E Meadows of Dan	14	1930EST			0	2	4	0	Flooding	
Rocky Mount			atri minaff	from nove					ured into Cockram Mil	l===4 (1 ==:1=
	trav incl Roc in p	veled down hes of rain cky Mount to portion of the	the Dan R since July hat washed he road sli	iver but ca 10th satur 1 out a 12- ghtly injur	used ated foot c ing th	only the grulvert the two	minor ound . A ca occu	damag and a ar plun pants.	eal and buckwheat flou e. In Franklin County heavy rainstorm cause ged into the resulting 3	y, up to 11.5 d flooding at 0-foot caved-
Dinwiddie County	10	1600ECT			1	0	0		Lightning	•
Dinwiddie County Dinwiddie	An	1600EST 11-year-old h. (M110)	l boy was		1 njurec	0 I by I	O ighting	0 g while	Lightning playing in his yard.	He died July
Dinwiddie County Dinwiddie Page County 3 NW Luray	An 27tl	11-year-old	l boy was		~				•	He died July
Dinwiddie Page County	An 27th 20 Lig	11-year-old h. (M110) 2200EST	ed a fire th	seriously i	njurec O	l by l	ighting	g while	playing in his yard.	·
Dinwiddie Page County	An 27th 20 Lig	11-year-old h. (M110) 2200EST htning starte	ed a fire th	seriously i	njurec O	l by l	ighting	g while	e playing in his yard. Lightning	·
Dinwiddie Page County 3 NW Luray Fairfax County Chantilly	An 27th 20 Lig north	11-year-old h. (M110) 2200EST htning starte thwest of L	ed a fire th uray).	seriously i	O d a hi	O storic	4, two-	0 century	e playing in his yard. Lightning y-old house at Fort Rho	odes, (3 miles
Dinwiddie Page County 3 NW Luray Fairfax County Chantilly	An 27th 20 Lig north	11-year-old h. (M110) 2200EST htning starte thwest of L	ed a fire th uray).	seriously i	O d a hi	O storic	4, two-	0 century	Lightning y-old house at Fort Rho	odes, (3 miles
Dinwiddie Page County 3 NW Luray Fairfax County Chantilly Annandale City of Virginia	20 Lignor 21 Thr	11-year-old h. (M110) 2200EST htning starte thwest of L 1419EST ree houses w	ed a fire th uray). vere set afi	seriously i	o d a hi o ghtnin	O storic O g stri	4, two-	0 century 0 Damag	Lightning y-old house at Fort Rho Lightning e was estimated at about	odes, (3 miles ut \$130,000.
Dinwiddie Page County 3 NW Luray Fairfax County Chantilly Annandale City of Virginia	An 27th 20 Lig north 21 Thr	11-year-old h. (M110) 2200EST htning starte thwest of L 1419EST ree houses w	ed a fire th uray). vere set afi	seriously i	o d a hi o ghtnin	O storic O g stri	4, two-	0 century 0 Damag	Lightning Lightning Lightning was estimated at about	odes, (3 miles ut \$130,000. h umbrella.
Dinwiddie Page County 3 NW Luray Fairfax County Chantilly Annandale City of Virginia Beach	20 Lignor 21 Thr 21 Thr 21	11-year-old h. (M110) 2200EST htning starte thwest of L 1419EST see houses w 1300EST see people w	ed a fire thuray). Vere set afivere injure	seriously is at destroyed re from light, one seriously in the seriously in	o d a hi o ghtmin o ously	O storic O g stri 3, whil	4 , two- 4 kes. 0 le sitti	0 century 0 Damag 0 ng on	Lightning y-old house at Fort Rho Lightning e was estimated at about Lightning the beach under a beac	odes, (3 miles ut \$130,000. h umbrella.
Dinwiddie Page County 3 NW Luray Fairfax County Chantilly Annandale City of Virginia Beach	20 Lignor 21 Thr 21 Tree 21	11-year-old h. (M110) 2200EST htning starte thwest of L 1419EST see houses w 1300EST see people w 1552EST	ed a fire thuray). vere set afivere injured	seriously in at destroyed are from light dispersions.	o d a hi o ghtmin o ously	O storic O g stri 3, whil	4 , two- 4 kes. 0 le sitti	0 century 0 Damag 0 ng on	Lightning y-old house at Fort Rho Lightning e was estimated at about Lightning the beach under a beac	odes, (3 miles ut \$130,000. h umbrella.

21 1845EST-1900EST 3 0 Thunderstorm Winds $\mathbf{0} \cdot \mathbf{0}$ Numerous trees were down in the central part of the county along with power lines. Winds were estimated at 50 to 60 mph.

New Kent County

		TIME			NO.	OF SONS	ESTIN	AATED		JULY 199
PLACE	D B E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	P. C.	OmbCc.2-	~-compos-v	UACOAN.	CHARACTER OF STORM	
VIRGINIA Cont'	d									
Chesterfield County	21	1900EST		٠	0	0	4	0	Lightning Flooding Thunderstorm Win	ds
	A f	ew trees we	ere down.	Damage r	eport	ed fro	m floo	oding a	nd lightning strikes.	,
Frederick County Winchester	22	1900EST	,		0	0	3	0	Lightning	
	Lig pla	htning struent's water g	ck the city eneration ('s water t	reatm as ter	ent p	lant ca rily ha	using lved.	\$10,000 to \$20,000	damage. Th
Mathews County 2 N Cobbs Creek	26	1600EST			0	0	0	0	Waterspouts	
	US a m	CG observe	r at Milfor	d Haven s	statio	n repo	orted tl	hree wa	aterspouts in the area,	, lasting abor
City of Norfolk	28	1126EST- 1139EST		٠	0	0	0	0	Funnel Cloud	
	An	observer at	Norfolk I	nternation: -northwest	al Ai: of th	rport (ORF,	3 mile	es east of Norfolk) sig	ghted a funn
WASHINGTON		,								
WAZ007 North Central										
Washington	05	1600PST			0	0	4	0	Heavy Rain	
	floo nor con Kin	avy rain sho ding up to thwest of \ vective acti	wers in Ok half a foo Winthrop, vity over t and lightning	tanogan Co t deep in were stran he western	ounty the to nded Case	cause wns of for s cade f	of Several coothill	ral mu ak and hours ls cause	veather disturbance measurements and eastern distributions and eastern distributions. Sightseers of the muded scattered power our at an apartment. Dans	oads and street on Harts Past slides. That stages in sout
WAZ012 Washington Cascades	11	1400PST- 1800PST			0	0	0	0	Lightning	,
	mor allo Pin We by	ved northwa wed severa chot Nation	ard throug I lightning al Forest cier Peak showers,	h the ever fires to b and Moun	iing. e sta t Rai	War rted. nier N	m and Betwe Vations	dry ce en 40 al Park	Mountains during the onditions before the and 50 fires started in with additional fires were small and were Wenatchee were in ste	thunderstorn in the Giffor is in the Lak
WAZ007 North Central Washington		1630PST			0	0		0	Heavy Rain	

Moist, southerly flow over the Pacific Northwest the 23rd and 24th produced an unstable air mass over eastern Washington. Thunderstorms with heavy rain showers formed over Okanogan and Chelan counties during the afternoon causing a few road closures in the area. State Highway 20 near Twisp was closed for a few hours when a cloudburst washed out 300 yards of fill along

JULY 1990

·		TIME			NO. PER	OF SONS	EST II	MATED NGE	
PLACE	D&TE	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K-LLED	- X-) URILD	P-9200-Y	COCOO.	CHARACTER OF Storm

WASHINGTON Cont'd

the road. Highway 97 near Mallot was closed when the same rain shower washed a 2-foot mud slide across the road. Rain showers reduced visibilities to as low as 15 feet causing vehicles to pull to the side of the road until the downpours decreased.

WAZ006 Spokane County

24 2230PST

0 0 5 0 Flash Flood

Heavy rain from thunderstorms moving over the Spokane metropolitan area dropped over half-inch rainfall amounts in a half hour. Streets and highways in the downtown Spokane area were flooded for a few hours. Interstate 90 had water up to 3 feet deep in places and Highways 195 and 2 were also closed because of water over roadways. Heavy rain also contributed to the washout of a street leading to the Latah Creek bridge.

WAZ007 Douglas County

30 1500PST

0 0 0 4 Hail (0.63)

Afternoon thunderstorms with five-eights-inch hail destroyed about 400 acres of wheat 2 miles west of the town of Mansfield. Hail from the brief storm accumulated to a depth of 5 inches. Wind and lightning from these thunderstorms also caused scattered power outages and three small brush fires in the Cle Elum area.

WEST VIRGINIA

Randolph County Valley Head

01 0450EST-0530EST

0 0 0 0

Debris clogged both Windy and Indian Run, causing flooding along Route 219.

Boone County Danville

ville 01 0715EST

0 0 0 0 Hail (1.00)

Flash Flood

Quarter-size hail fell during a 15-minute downpour.

Monongalia County Morgantown	01	1115EST	0	0	?	0	Thunderstorm Winds
Preston County Tunnelton 1 SW Reedsville Rowlesburg 1 E Masontown	01	1120EST	0	0	3	0	Thunderstorm Winds
	01	1120EST	0	0	0	0	Thunderstorm Winds
	01	1120EST	0	0	0	0	Thunderstorm Winds
	01	1145EST	0	24	0	0	Lightning

Individuals of a bow hunting club, attending an archery shoot, sought shelter from the rain under a 10- by 20-foot open-ended pavilion. The pavilion consisted of wooden supports and a tin roof in a wooded area. Lightning struck the pavilion, splintering a wood support post, melted gold plating off archery trophies, and punched pin holes in soft drink cans. People were knocked to the ground or thrown 10- to 15-feet. Injuries were mostly burns. Thunderstorms also blew down numerous trees and caused power outages. One tree fell onto a house trailer at Tunnelton.

Marion County Mannington Harrison County	01	1230EST	0	0	?	0	Thunderstorm Winds
Anmore Taylor County	01	1240EST	0	0	?	0	Hail (1.75)
10 E Bridgeport Barbour County	01	1245EST	0	0	0	0	Hail (0.75)
Volga Lewis County	01	1300EST	0	0	0	0	Hail (0.75)
Jane Lew	01	1313EST	0	0	0	0	Hail (0.75)

r					1 40	<u> </u>	F	44.760	JULY 1	990
		TIME		;	PER	SONS	EST IN	IATED IGE		
PLACE	D E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K-C-LED	CHICACL Z	o acOo was	WOOD	CHARACTER OF STORM	
				<u> </u>		D	Ţ			
WEST VIRGINIA	A C	ont'd								
Randolph County Beverly Dailey	01 01	1335EST 1340EST			0	0	0	0	Hail (0.75) Hail (0.75)	
Upshur County Hinkleville	01	1345EST			0	0	Ò	0	Thunderstorm Winds	
	Hir	understorms ikleville. G m Barbour,	olf ball-siz	e hail was	obser	ved a	t Anmo	oore. I	Fallen trees blocked Route 20 Numerous sightings of dime-size) at hail
Nicholas County Canvas	01	1445EST			0	0	0	0	Thunderstorm Winds	
	Sev	eral large t	rees limbs	were brok	en.					
Summers County Hinton	01	1630EST			0	0	0	0	Hail (0.75)	
Raleigh County Beckley	01	1710EST			0	0	0	0	Hail (0.75)	
Monongalia County Wadestown	05	1337EST			0	0	?	0	Thunderstorm Winds Hail (1.00)	
	Sev	veral trees w	ere down	and quarte	r-size	hail	fell.			
Putnam County Eleanor	05	2055EST			0	0	6	0	Thunderstorm Winds	
Kanawha County Dunbar	05	2100EST			0	0	0	0	Thunderstorm Winds	
	Ele sec and to l	mentary, m tion was blo classrooms homes. Swe	iddle, and own off th . A churc eet corn in re broken	vocational e middle s h steeple w gardens w off. Putna	l scho chool as blo as blo m Co	ools s gym own o own o	ustaine . Run ff. Mi lown.	d roof off cau nor da One c	nches to be blown over in Elean damage. At least a 60-foot-squased water damage to the gym for mage to porches, patios, and roof ar was damaged by falling trees nated \$750,000 damage, over half	uare loor fing and
Webster County 1 S Cleveland	06	0130EST- 0400EST			0	0	3	3	Flash Flood	
	Sta Jer	tionary thun ry Run had	derstorms flooded ba	dumped or asements, v	ver 2 vashe	inche d 2 p	s of rai	n on p bridge	ortions of northern Webster Cours away and flooded several garde	nty. ens.
Preston County Albright 5 S Brandonville	09 09	1730EST 1745EST			0	0	0	0	Hail (0.88) Hail (0.88)	
Harrison County Lumberport Shinnston	09 09	1840EST 1850EST			0	0	0	0	Thunderstorm Winds Thunderstorm Winds	
	Sev	eral trees w	ere blown	down.						
Wood County Williamstown	10	2220EST			. 0	0	3	0	Thunderstorm Winds	

Ten big poplar and maple trees were blown down in town. One tree fell through the side of a house. Damage estimated at \$4,000.

										JULY 1990
,		TIME	,	ļ	NO. PER	OF SONS	ESTIM DAMA	ATED GE		
PLACE	D	LOCAL STANDARD	LENGTH PATH (MILES)	PATH (YARDS)	K-1-1-ED		4-cam 1020	CEOTN	CHARACTER OF STORM	
WEST VIRGINI	A C	ont'd								
Preston County Etam	11	0215EST			0	0	0	0	Thunderstorm Wi	nd s
	Th	ree to five t	rees were	blown dow	'n.					
Tucker County Parsons	11	1430EST			0	0	0	0	Thunderstorm Wi	nds
	Lar	rge limbs an	d trees we	re blown o	lown.	,				
Wood County Rockport	11	1710EST	•		0	0	0	0	Hail (0.88)	
Jackson County Sherman	11	1815EST			0	Ô	3	0	Thunderstorm Wi Hail (1.75)	nds
	Sev	veral trees u o houses. (prooted an Sutters rip	d marble- ped off ho	to go uses.	lf bal	l-size ł	nail fel	l. Large tree branch	nes were blown
Harrison County Lost Creek	11	2220EST- 2300EST			0	0	0	0	Flash Flood	
	Los	st Creek ove	erflowed au	nd caused	mino	r flood	ding to	low-l	ying areas.	
Barbour County Nestorville	12	0200EST- 0400EST			0	0	3	0	Flash Flood	
	Sal	t Lick, Van vate bridge	dy Mill, a washed ou	and Teter (Creek	over	flowed	. Roa	ds under 18 inches	of water. One
Hancock County Weirton	12	1200EST			0	0	?	0	Flash Flood	
	Kin	igs Creek flo	ooded.						·-	
Ohio County Wheeling	12	1415EST							Flash Flood	
	Wa	lds Run and	Carmel R	Run floode	i.					
Hancock County Weirton	12	1430EST	·		0	0	?	0	Flash Flood	•
	Kin	igs Creek flo	ooded agai	n and stree	et flo	oding	was w	idespr	ead.	
Brooke County	12	1430EST			0	0	4	0	Flash Flood	
	50	eams overflo dwellings w side. Dama	ith baseme	ent floodin	ıg. C	ewer founty	floodin / anima	g thro al shel	ughout the county. ter flooded from wa	Follansbee had ter pouring off

Water from Ellis Run damaged gardens and washed out a road.

Gilmer County Troy-Baldwin

13 0400EST-0600EST

3

2

Flash Flood

	,									JULY 1990
		TIME		ļ	PER	OF SONS	ESTIM DAMA	ATED		
PLACE	D-0W	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	Ky - L - WO	OTTO C. E.		waczen	CHARACTER OF STORM	
WEST VIRGINIA	C C	ont'd		5						
Preston County Terra Alta	13	0430EST- 0600EST		•	O	0	3	0	Flash Flood	
	Spr Wa	uce Run and ter was in s	l Salt Lick ome busin	Roads blo	cked	by ov	erflow	ing str	reams. Basement floor	ding occurred.
Tucker County near St. George	13	0430EST- 0600EST			0	0	?	0	Flash Flood	
	Ho	rseshoe, Lea	ad Mine, a	ınd Minear	Run	s wer	e out c	of their	r banks. Highways w	ere blocked.
Upshur County Shelbyville	13	1710EST- 1900EST			0	0	0	0	Flash FloodBarbou	ır County
Volga	13	1745EST-		,	ŏ	ŏ	ŏ	ŏ	Flash Flood	a county
	Stre	eams blocke	d roads at	Shelbyvill	e. B	ig Ru	n over	flowed	i at Volga.	
Harrison County Wilsonburg	14	2140EST- 2300EST			0	.0	?	0	Flash Flood	
	Wa	ter from a c	lebris dam	broke on	a stri	p min	ie, sen	ding w	vater onto a home and	motor home.
Ohio County Wheeling	15	0030EST			0	0	4	0	Flash Flood	
	Mu	oding occur d slides and nage.	red on Lor I basemen	ng Run in t t flooding	the W were	oodse comi	cale reg mon ar	gion of ad a re	f the city, plus along hestaurant and temple	National Road. received water
Hancock County	15	0230EST- 0800EST			0	0	3	0	Flash Flood	•
	Bas a p	ements wer ortion of Pl	e flooded um St. in	in Congo a Weirton u	and al	long l nined.	Kings (Creek.	Route 2 was closed	at Newell and
Brooke County Wellsburg	15	0320EST- 0800EST			0	0	3	0	Flash Flood	
	Bla wit	ck's Hollov h urban floo	v, along Coding in the	ross Creek ne city.	in V	Vellsb	ourg w	as was	hed out. Residents v	vere evacuated
Marshall County 2 NW Moundsville	15	0410EST			0	0	3	0	Flash Flood	
	Flo	oding took	place alon	g Little Gi	rave (Creek	in Gle	n Dale	e.	

Mud slides and flooding were reported along Route 152.

Monongalia County Wadestown Wetzel County Hundred

Wayne County 2 N Lavelette 20 1655EST

20 1700EST

22 1640EST

0

0

0

3

0

0

0

Hail (0.88)

Hail (1.00)

Flash Flood

	_	1		1	NO.	OF	ESTU	MATED		JULY 1990
		TIME	LENCTH	עדמינע	PĚŘ	SONS		AGE		
PLACE	Đ	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)) LEO	2 JORGEO	4- 2011 00200	CACOAO	CHARACTER OF Storm	
WEST VIRGINIA	A C	ont'd								
Pleasants County Arvilla	22	1750EST			0	0	3	0	Thunderstorm W	vinds
Tyler County Bens Run	22	1750EST			0	0	0	0	Thunderstorm W	inds .
	Nu feet	merous trees t with winds	s were blov s estimated	wn down fo l at 80 mp	orm A h at A	Arvilla Arvilla	to Bei a.	ns Run	. Large branches th	rown 100 to 200
Roane County 4 NW Spencer	22	1330EST			0	0	4	0	Lightning	
	fire	thtning struct. The fire mage was es	destroyed	the barn's	barn cont	near l tents,	Billings includ	s. The ling 1,	barn was complet 500 bales of hay a	ely destroyed by nd a new bailer.
Wayne County 2 N Lavelette	22	1640EST			0	0	3	0	Flash Flood	
	Mu	d slide and	flooding a	long Rout	e 152				•	
Cabell County Huntington	22	1650EST- 1800EST	·		0	. 0	3	0	Flash Flood	
	Bas	sement flood	ling occur	red in the]	Ritter	Park	region	ı. Via	ducts along 1st and	8th streets were
	tloc	oded. Floor	ding also o	occurred al	ong :	ord A	venue i	north t	o Ohio River.	
WISCONSIN										
LaFayette County South Wayne	04	1852CDT			0	0	?	?	Hail (1.25)	
Green County Browntown	04	1852CDT			0	0	?	?	Hail (1.25)	
	A s Wa	severe thund yne and Bro	lerstorm d owntown.	ropped hai	lup	to one	e and c	one-qua	arter-inch in diamet	er around South
Sheboygan County 2 W Sheboygan 2 W Sheboygan	08 08	1755CST 1755CDT			0	0	?	?	Hail (1.75) Thunderstorm W	inds (G52)
	A s	severe thund st of Sheboy	lerstorm pa gan.	acking win	ds up	to 60	0 mph	deposi	ted hail up to golf	ball-size 2 miles
Lincoln County Irma 4 S Irma	16 16	1415CDT 1425CDT			0	0	?	?	Hail (0.75) Thunderstorm W	Tinds
		severe thund es in the Irm		enerated ha	il up	to th	ree-qua	arter-in	ich in diameter and	downed several
Dane County Mt. Horeb	18	1251CDT			0	0	?	?	Hail (1.00)	
	One	e-inch-diame	eter hail fr	om a sever	re thu	ınders	storm n	ear M	t. Horeb.	
Washington County West Bend	22	1450CDT			0	0	?	?	Thunderstorm W	inds

Several trees were knocked down by severe thunderstorm winds near West Bend.

	T	TIME			NO. PER	OF SONS	EST II	MATED AGE		JULY 1990
PLACE	D D	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	K) L L	CHING LE	4- 20 m90300	MACAM	CHARACTER OF STORM	
WYOMING										
Big Horn County Near Byron	02	1545MST 1615MST			0	0	2	0	Thunderstorm Wir	nds (G50)
	The dar	understorm nage occurr	winds to o	60 mph blon where so	ew th	rough mall	Big l	Horn C were d	County late in the after estroyed.	ernoon. Some
Johnson County Near Buffalo		1655MST 1705MST	<u>.</u>		0	0	3	. 0	Thunderstorm Wir	nds (G50)
	few	hunderstorn trees were nis courts.	n produced blown do	l wind gus wn in the	ts to i	near 6 ark, c	0 mph one of	in the	Buffalo area around lamaging lighting equ	1700 MST. A
Fremont County Near Lander	02	1720MST 1730MST	<u>-</u>		0	0	3	0	Thunderstorm Win	nds (G50)
	A t	hunderstorn T. These v	n produced vinds blew	l wind gust v down a te	s to r	ear 60 ion ar	0 mph ntenna	in the in Lar	Lander area between der.	1820 and 1830
Campbell County Near Gillette	02	1745MST 1815MST			0	0	2	0	Thunderstorm Wir	nds (G50)
	Thu	understorms ne power lir	produced nes.	winds up	to 60	mph	in the	Gillette	e area around 1800 M	IST, damaging
Albany County 15 E Laramie	04	1520MST			0	0	0	0	Funnel Cloud	
	A l Lar	brief funnel amie at 152	cloud wa 0 MST.	as sighted	by th	ie pul	blic ne	ear the	Vedauwoo picnic g	rounds east of
Niobrara County 20-25 N Lusk	04	1840MST 1930MST			0	0	2	0	Hail (0.75)	
	A t Lus	hunderstorn sk between	n produced 1840 and	d hail up to 1930 MST	thre	e-qua few ca	rter-in ars we	ch and re sligh	heavy rain 20 to 25 ntly damaged by the l	miles north of
Sheridan County Near Leiter	05	1800MST			0	0	0	0	Hail (0.75)	
	Hai	il up to thre	e-quarter-	inch occuri	ed fr	om a	thund	erstorm	near Leiter around	1800 MST.
Laramie County Near Cheyenne	08	1655MST 1705MST		10	0	0	O	0	Tomado (F0)	
	MS	veral funnel ST. Two ve eyenne at 16	ry brief to	uchdowns	were	repor	ted ab	l east o out 3 r	f Cheyenne between niles south and 6 mil	1620 and 1720 es southeast of
Platte County Near Slater	. 09	1420MST			0	0	0	0	Funnel Cloud	
	Αl	orief funnel	cloud was	sighted no	ar Sl	ater a	round	1420 1	MST.	
Laramie County Near Albin	09	1550MST			0	.0	0	0	Thunderstorm Wir	nds (G50)

Thunderstorm winds of up to 60 mph occurred at Albin around 1550 MST.

				·			,			JULY 1990
}.		TIME]		PER	SONS	ESTIN	MATED AGE		
PLACE	D E	STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	- CHIP	CHICACLE -	compo	COCOEN	CHARACTER OF STORM	
						Б	Ϋ́Υ			
WYOMING Con	t'd									
Johnson County 20-25 S Buffalo	15	1600MST	•		0	0	4	4	Hail (1.75)	
	A s hai ran	severe hail so l up to the ches in the	torm struck size of go area. Past	the area a olf balls. ture land a	bout Dam nd so	20 to age or ome fi	25 mil ccurrec elds of	es sout I to ca hay v	th of Buffalo around 16 ars, roofs, and window were also heavily damag	00 MST with vs on several ged.
Fremont County N of Lander	15	1730MST	•		0	0	3	0	Lightning	
		htning strue	ck a house	just north	of L	ander	aroun	ıd 173	0 MST, causing extens	sive electrical
Fremont County 10 NW Lander	20	1445MST	,		0	0	0	0	Funnel Cloud	
	Sor	me brief fun	nel clouds	were sigh	ted al	bout 1	0 mile	s nort	hwest of Lander around	i 1445 MST.
Goshen County 10-15 WSW Torrington	20	1445MST 1500MST		•	0	0	0	0	Funnel Cloud	
	A f	unnel cloud 1500 MST.	was obser	ved about 1	0 to	15 mil	les wes	st and s	outhwest of Torrington	around 1445
Sheridan County 10 W Sheridan	20	1500MST	•		0	0	0	0	Funnel Cloud	
	Αł	orief funnel	cloud was	sighted ab	out 1	l0 mil	les wes	st of S	heridan around 1500 M	IST.
Platte County 10-20 SSE Wheatland	20	1500MST 1600MST		·	0	0	0	0	Funnel Cloud	
	A f	ew brief fun	nel clouds	were sight	ed so	uth an	d sout	heast o	of Wheatland between 1:	500 and 1600
Laramie County S Part Cheyenne	20	1627MST 1635MST			0	0	2	0	Hail (1.00)	
Laramie County Near Carpenter	20	1715MST 1730MST	<u>'</u> -		0	0	2	0	Hail (0.75)	
	unt	severe thund	lerstorm de T. The st	orm contin	ar Cl	heyeni east, i	ne aroı	and 16	25 MST, dropping hail ae-half- to three-quarter	up to 1-inch r-inch hail at
Lincoln County Near Cokeville	23	1330MST			0	0	0	0	Funnel Cloud	
	Αł	orief funnel		observed	arour		80 MS	Γ.		
Lincoln County Near Afton	23	1450MST 1510MST	_		0	0	0	0	Thunderstorm Wind	s (G50)

Thunderstorms with winds up to 60 mph blew through the Afton-Bedford area around 1450 to 1510 MST. Some minor damage occurred to trees and outside structures.

		TIME			NO.	OF SONS	ESTI!	MATED AGE		JULY 1990
PLACE	D E	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	r Tree	CHIBOCLE	P.RCO. HIS-Y	COCOLIN	CHARACTER OF STORM	
VYOMING Cont	t 'd									•
aramie County 2-4 NNE Cheyenne	23	1558MST- 1605MST	-		0	0	0	0	Hail (2.00)	
· .	nor	evere thund th and north erally rathe	heast of C	oduced ha heyenne.	il up A fe	to 1 ii w stoi	nch arc nes up	ound 1: to 2 i	558 to 1605 MST about 2 nches also occurred. The	to 4 mile ne hail wa
remont County 40-50 SE Lander	24	1430MST- 1440MST	-		0	.0	0	0	Hail (1.00)	·
	Hai 143	l up to 1-in 0 and 1440	ich fell fro MST.	om a thund	lersto	rm ab	out 40	to 50	miles southeast of Land	er betweer
aramie County	24	1435MST- 1445MST	-		0	0	0	0	Thunderstorm Winds Hail (0.75)	(G50)
	A th	hunderstorn Cheyenne be	n produced etween 143	gusts up to 35 and 144	o 60 : 5 M:	mph a ST.	nd thre	ee-quai	ter-inch hail 7 miles nort	h-northeas
weetwater County 33 N Rock Springs	24	1503MST- 1505MST	- 0.1	10	0	0	0	0	Tornado (F0)	
	A v	veak tornad und 1503 M	o briefly t IST.	ouched do	wn o	ver o _j	pen rai	nge ab	out 33 miles north of Ro	ck Springs
weetwater County Near Green River	24	1630MST			, 0	0	0	0	Funnel Cloud	
	A f	ew short-liv	ed funnel	clouds we	re sp	otted	in the	Green	River area around 1630	MST.
aramie County 5 S Cheyenne	25	1500MST- 1515MST	-		0	0	0	0	Funnel Cloud	
		ew short-live 5 MST.	ed funnel o	clouds were	e sigh	ited al	oout 5	miles s	outh of Cheyenne betwee	n 1500 and
Albany County Near Rock River	28	1425MST			0	0	0	0	Funnel Cloud	
	Tw	o brief funn	el clouds	were sight	ed in	the R	lock R	iver ar	ea around 1425 MST.	
aramie County Pine Bluffs	29	1500MST- 1600MST	-		0	0	3	0	Flash Flood	
	A t	hunderstorn T. Minor (n produced flooding of	1 3 to 4 inc f streets oc	ches o	of rain	n in the	e Pine , with	Bluffs area between 1500 some basements flooded	and 1600
Fremont County 17 SE Riverton	29	1500MST- 2000MST			0	0	4	0	Flash Flood	

A slow-moving thunderstorm produced over 2 inches of rain about 17 miles southeast of Riverton between 1500 and 2000 MST. Flash flooding occurred along State Highway 135, covering the road to a depth of around 4 feet and washing out two sections of the road.

0

Flash Flood

1500MST-2000MST

PLACE

TIME

LOCAL
STANDARD
PATH
(MILES)

DO OF PERSONS
DAMAGE

V I P C CHARACTER
OF PATH
(MILES)

V ARDS)

DO OF PERSONS
DAMAGE

V I P C CHARACTER
OF STORM
STORM

WYOMING Cont'd

Platte County Near Chugwater

29 1425MST

0 0 0 0 Funnel Cloud

A few brief funnel clouds were sighted just east of Chugwater around 1425 MST.

Fremont County Lander/Riverton

31 1700MST -1715MST

0 0 0 Thunderstorm Winds (G50)

Thunderstorm winds of up to 60 mph blew through central Fremont County between 1700 and 1715 MST.

Natrona County Near Casper

31 1905MST-1930MST

0 0 0 Thunderstorm Winds (G50)

Thunderstorms produced winds up to 60 mph in the Casper area between 1905 and 1930 MST.ALASKA, Southeastern

None reported.

ALASKA, Southern

Kuskokwim Valley Bristol Bay Cooper River Basin Cook Inlet-Susitna Valley

01-31 N/A

0 0 ? ? Lightning

Hot, dry weather, and lightning strikes sparked dozens of fires which burned hundreds of thousands of acres of forest and tundra during the month. Most of the fires were blamed on lightning early in the month when the state as a whole logged 3,000 to 4,000 lightning strikes per day. Many fires were still burning at month's end as dry weather and lightning activity continued and because many of the fires, not threatening people or property, were not fought. Among the notable fires: more than 40 fires burned hundreds of thousands of acres of unpopulated forest near McGrath. A cluster of four fires near Nikolai burned about 250,000 acres by the fourth week. A 1,500 acre blaze near Lake Minchumina threatened the village and a fire 25 miles northeast of King Salmon burned 1,100 acres late in the month. Lightning started eight fires on the Kenai Peninsula near Ninilchik on July 3rd, scorching 111 acres by the end of the week.

HAWAII

None reported.

PACIFIC

None reported.

PUERTO RICO

Puerto Rico Anasco

25 Afternoon

0 0 4 0 Landslide

Rainfall amounts of 2 to 3 inches over a 24-hour period were recorded as a tropical wave moved west over Puerto Rico. A landslide collapsed a wall in a concrete house in the town of Anasco. No significant flooding was reported.

JULY 1990

		TIME			NO. PER:	OF SONS	EST II	MATED AGE	
PLACE	DATE	LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	KILLED	127UXWO	Ф.ЖОФШЖ — У	CEOPN	CHARACTER OF STORM

PUERTO RICO Cont'd

Yabucoa

26 Afternoon

1 0 0 0

Heavy Rain

A 38-year-old woman drowned in an attempt to wade across the swollen waters of Rio Quebradillas in Yabucoa. The woman was carrying her 8-year-old daughter and was less then halfway across when the current tumbled both of them and swept them away. The girl was pushed to shore by the current and managed to save herself. (F380)

VIRGIN ISLANDS

None reported.

CORRECTIONS

JUNE 1990

NEBRASKA - June 15 - Tornado (F4) - Hitchcock County Page 4 - Map of confirmed tornadoes - Shows an F5 in Nebraska, should be an F4

ADDITIONS

JUNE 1990

FLORIDA

Lee County Cross Creek	06	1645EST	0	0	0	0	Thunderstorm Wind (G52)
	Wi	nd gusts of 60 mph.					
Charlotte County Punta Gorda	06	1725EST	0	0	3	0	Thunderstorm Wind
	Pov	wer lines were downed.					
Hillsborough County Temple Terrace	06	1910EST	0	0	0	0	Hail (0.75)
Hillsborough County Sun City Center	06	1945EST	0	0	0	5	Thunderstorm Wind
	Tre	es were downed.					
Sarasota County Sarasota	07	1830EST	0	0	2	1	Thunderstorm Wind
	A t	ree and a shed were blown down	1.				

167

TYPE	ALABAMA	ARIZONA	ARKANSAS	CALIFORNIA	COLORADO	CONNECTICUT	DELAWARE	FLORIDA	GEORGIA	IDAHO	I L L I NO I S	INDIANA	T O JA	KANSAS	ANDC-14	LOUISIANA	MAINE	MARYLAND & DC	MASSACHUSETTS	MICHIGAN	MINNESOTA	MISSISSIPPI	MISSOURI	MONTANA	NEBRASKA	2 m><04	MAHENDER KINZ
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TORNADOES										0												*	0	0		0	
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STORM DAMAGE CATAGORIES

REFERENCE NOTES

3 4 5 6 7 8	Less than \$50 \$50 to \$500 \$500 to \$5,000 \$5,000 to \$50,000 \$50,000 to \$500,000 \$500,000 to \$5 Million \$5 Million to \$50 Million \$50 Million to \$500 Million \$500 Million to \$5 Billion	0/Blank * ** @ # # # o/c	None reported. Miles instead of yards. Yards instead of miles. Includes heavy sleet storm. Freezing drizzle and freezing rain, commonly known as glaze. Report incomplete. Report not received. Indicates Crop Damage amount is included in the value given for property damage.
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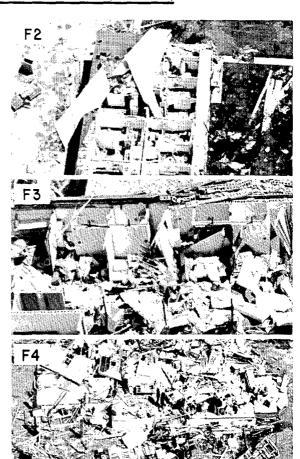
When reports are not received or are incomplete, the Storm Summary National Death and Injury totals may also be incomplete.

Definition of Fujita Tornado Scale (F scale)

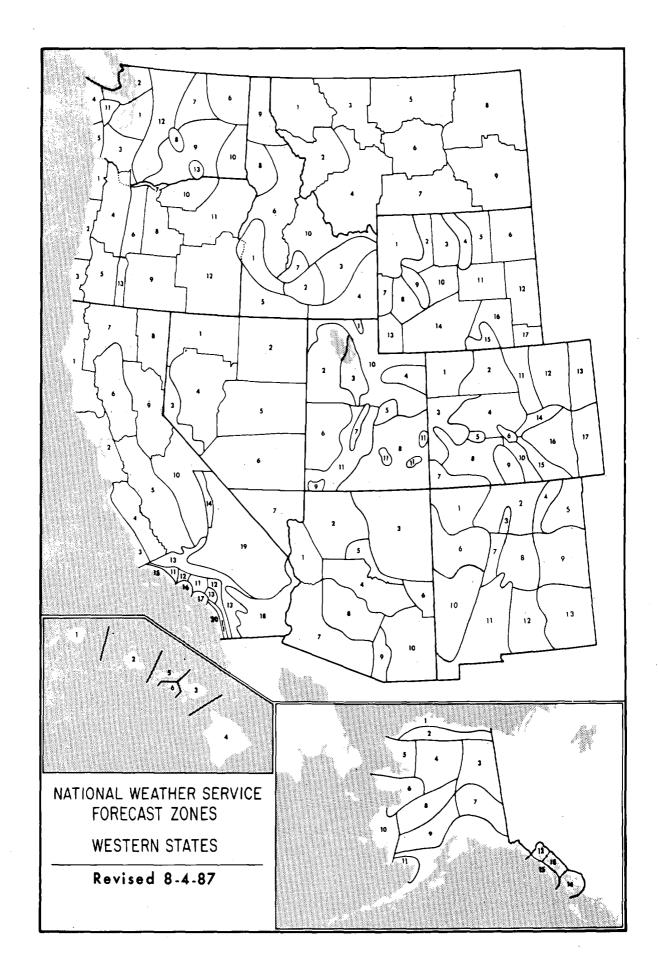
- (FO) Gale tornado (40-72 mph): Light damage Some damage to chimneys; break branches off trees; push over shallow-rooted trees; damage sign boards.
- (F1) Moderate tornado (73-112 mph): Moderate damage The lower limit (73 mph) is the beginning of hurricane wind speed; peel surface off roofs; mobile homes pushed off foundations or overturned; moving autos pushed off the roads.
- (F2) Significant tornado (113-157 mph): Considerable damage Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light-object missiles generated.
- (F3) Severe tornado (158-206 mph): Severe damage Roofs and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted; heavy cars lifted off ground and thrown.
- (F4) Devastating tornado (207-260 mph): Devastating damage Well-constructed houses leveled; structure with weak foundation blown off some distance; cars thrown and large missiles generated.
- (F5) Incredible tornado (261-318 mph): Incredible damage Strong frame houses lifted off foundations and carried considerable distance to disintegrate; automobile-sized missiles fly through the air in excess of 100 m; trees debarked; incredible phenomena will occur.
- (F6-F12) (319 mph to Mach 1, the speed of sound): The maximum wind speeds of tornadoes are not expected to reach the F6 wind speeds.

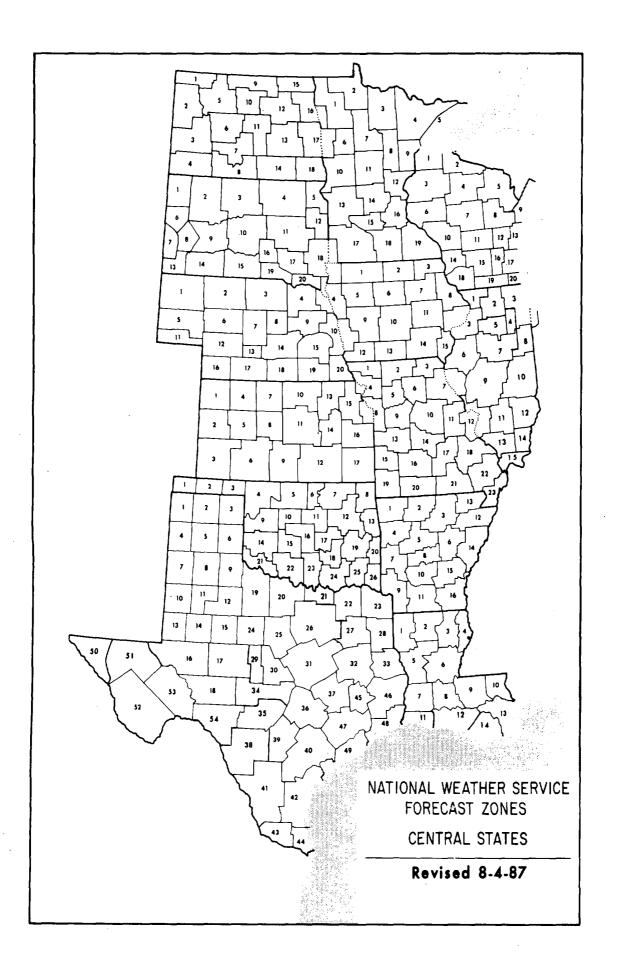
(F0+F1)	Weak Tornado
(F2+F3)	Strong Tornado
(F4+F5)	Violent Tornado

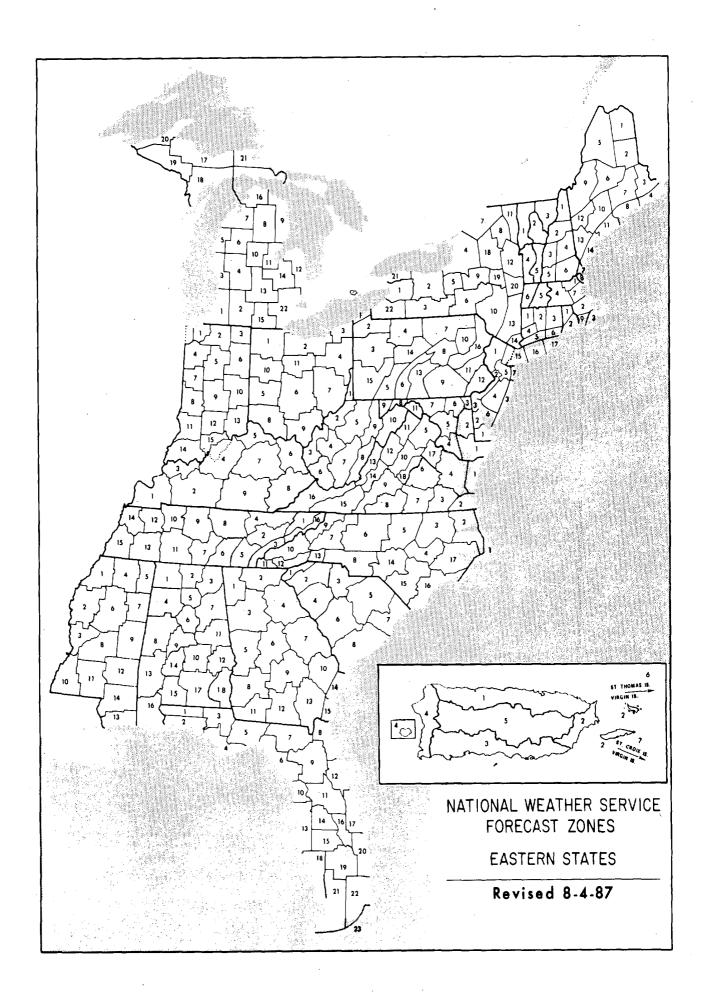
From J. Atmos. Sci., August 1981, p. 1517-1519











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STORM DATA

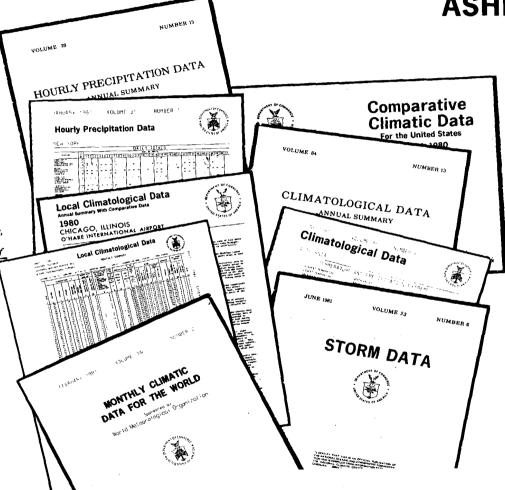
Monthly issue presents a chronological listing, by states, of occurrences of storms and unusual weather phenomena, together with data on the paths of individual storms, deaths, injuries, and estimated property damage, and a brief narrative description of each event. A new section in the bulletin entitled "OUTSTANDING STORMS OF THE MONTH" highlights severe weather and includes descriptive photographs of storms, their tracks, and analyzed maps. The December issue includes annual summaries of tornadoes and lightning and North Atlantic tropical cyclones.

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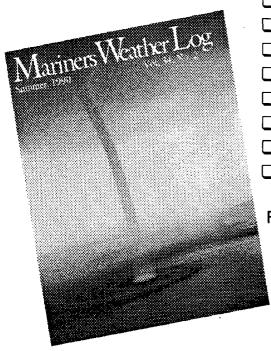
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